

JOHNS HOPKINS UNIVERSITY CIRCULARS

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GENERAL STATEMENTS AS TO THE COURSES OF INSTRUCTION.

The Johns Hopkins University will commence its twenty-fifth year of instruction on October 1, 1900. The work will go forward in these divisions:

The Graduate department, in which arrangements are made for the instruction of advanced students in the higher studies of literature and science;

The Undergraduate or Collegiate department, in which students receive a liberal education leading up to the degree of Bachelor of Arts;

The Medical department, in which students who have already received a liberal education are received as candidates for the degree of Doctor of Medicine, and in which Doctors of Medicine may attend special courses.

In other words, arrangements are made for the instruction of the following classes:

1. Graduate students and other qualified persons desiring to continue for one or more years their liberal education, and possibly to become candidates for the degree of Doctor of Philosophy;

2. Graduate students and other qualified persons wishing to proceed to the degree of Doctor of Medicine;

3. Doctors of Medicine who desire to follow special courses of lectures and laboratory work;

4. Undergraduates looking forward to the degree of Bachelor of Arts;

5. Special students who have not received an academic degree and are not candidates for a degree, but who desire to follow special courses of instruction in literature and science.

The medical department is open to women; the other departments are not.

An academic building, called McCoy Hall, in commemoration of its donor, contains the library

and the class-rooms in language, literature, history, and philosophy.

Laboratories are provided in Chemistry, Physics and Electricity, Geology and Mineralogy, and in the Biological Sciences (Anatomy, Physiology, Zoölogy, and Pathology).

Seminaries are organized in the Greek, Latin, French, German, English, Sanskrit, and Semitic languages, and also in History and Political Science. There are various scientific associations and journal clubs which hold regular meetings.

The Library contains ninety-four thousand volumes, part of which are kept in the central reading room, while the remainder of the books are distributed according to their subjects in the different laboratories and seminaries.

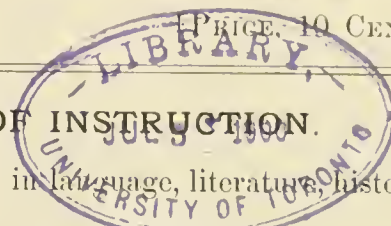
The Library of the Peabody Institute contains one hundred and thirty-five thousand volumes. These books are selected with reference to the wants of scholars. They are well chosen, well arranged, well bound, and well catalogued, and are accessible daily from nine in the morning until half-past ten in the evening.

The proximity of Baltimore to Washington enables the students to visit the libraries, museums, and scientific foundations of the Capital.

The academic year extends from the first of October to the fifteenth of June.

The charge for tuition is one hundred and fifty dollars per annum in the graduate and undergraduate departments, and two hundred dollars in the medical department.

The Annual Register, giving full statements as to the regulations and work of the University, and separate announcements of the Medical Courses, will be sent on application.



PRICE, 10 CENTS.

FACULTIES OF PHILOSOPHY AND MEDICINE.

DANIEL C. GILMAN, LL. D.,
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Professor of German.

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Collegiate Professor of Chemistry.

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Medical Faculty.

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Professor of English Literature.

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Professor of Organic Geology.

JOSEPH S. AMES, PH. D.,
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Professor of Obstetrics.

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WILLIAM D. BOOKER, M. D.,
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Associate Professor of Oriental History, etc.

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Associate Professor of Anatomy.

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Associate Professor of Romance Languages.

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REID HUNT, PH. D., M. D.,
Associate Professor of Pharmacology.

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Associate Professor of Physical Chemistry.

WILLIAM W. RUSSELL, M. D.,
Associate Professor of Gynecology.

BOLLING W. BARTON, M. D.,
Lecturer in Systematic Botany.

PHILIP R. UHLER,
Associate in Natural History.

BERNARD C. STEINER, PH. D.,
Associate in History.

ROBERT L. RANDOLPH, M. D.,
Associate in Ophthalmology and Otology.

THOMAS B. FUTCHER, M. B.,
Associate in Medicine.

WILLIAM J. A. BLISS, PH. D.,
Associate in Physics.

JOSEPH C. BLOODGOOD, M. D.,
Associate in Surgery.

JAMES C. BALLAGH, PH. D.,
Associate in History.

ABRAHAM COHEN, PH. D.,
Associate in Mathematics.

J. ELLIOTT GILPIN, PH. D.,
Associate in Chemistry.

GEORGE C. KEIDEL, PH. D.,
Associate in Romance Languages.

EDWARD C. ARMSTRONG, PH. D.,
Associate in Romance Languages.

CHARLES R. BARDEEN, M. D.,
Associate in Anatomy.

HARVEY W. CUSHING, M. D.,
Associate in Surgery.

GEORGE W. DOBBIN, M. D.,
Associate in Obstetrics.

N. ERNEST DORSEY, PH. D.,
Associate in Physics.

DUNCAN S. JOHNSON, PH. D.,
Associate in Botany.

WALTER JONES, PH. D.,
Associate in Physiological Chemistry and
Toxicology.

PHILIP OGDEN, PH. D.,
Associate in Romance Languages.

GEORGE B. SHATTUCK, PH. D.,
Associate in Physiographic Geology.

NORMAN MACL. HARRIS, M. B.,
Associate in Bacteriology.

WILLIAM G. MACCALLUM, M. D.,
Associate in Pathology.

OTTO G. RAMSAY, M. D.,
Associate in Gynecology.

JOHN B. WHITEHEAD, JR., A. B.,
Associate in Applied Electricity.

HARRY L. WILSON, PH. D.,
Associate in Latin.

S. EDWIN WHITEMAN,
Instructor in Drawing.

FRANK R. SMITH, M. D.,
Instructor in Medicine.

H. BARTON JACOBS, M. D.,
Instructor in Medicine.

OLIVER L. FASSIG, PH. D.,
Instructor in Meteorology.

GUY CARLETON LEE, PH. D.,
Instructor in History.

HUGH H. YOUNG, M. D.,
Instructor in Genito-Urinary Diseases.

MURRAY P. BRUSH, PH. D.,
Instructor in Romance Languages.

THOMAS MCCRAE, M. B.,
Instructor in Medicine.

MORRIS C. SUTPHEN, PH. D.,
Instructor in Latin.

HENRY McE. KNOWER, PH. D.,
Instructor in Anatomy.

PERCY M. DAWSON, M. D.,
Instructor in Physiology.

EUGENE L. OPIE, M. D.,
Instructor in Pathology.

MERVIN T. SUDLER, PH. D.,
Instructor in Anatomy.

HENRY S. WEST, PH. D.,
Instructor in English.

CHARLES P. EMERSON, M. D.,
Instructor in Medicine.

J. EUSTACE SHAW, PH. D.,
Instructor in Italian.

WILLIAM M. MACKDERMOTT,
Director of Physical Training.

In addition, there are a number of Assistants in
the laboratories.

PROGRAMMES FOR 1900-1901.

The following courses in literature and science are offered for the academic year which begins October 1, 1900. They are open to properly qualified young men, according to conditions varying somewhat in each department.

MATHEMATICS.

Advanced Courses.

Professor NEWCOMB will guide the work of any well-prepared students who wish to pursue the subjects of Theoretical Astronomy and Celestial Mechanics, especially on the practical side. Special training in advanced mathematics and facility in, as well as taste for, logarithmic computations are essential.

Professor MORLEY.

Theory of Functions (*Advanced Course*).

Twice weekly, through the year.

Geometry (*Advanced Course*).

Three times weekly, through the year.

Mathematical Seminary.

Weekly, through the year.

Dr. COHEN.

Elementary Theory of Functions.

Twice weekly, through the year.

Lie's Theory of Transformation Groups.

Twice weekly, through the year.

Theory of Numbers.

Three times weekly, first half-year.

Advanced Differential Equations.

Twice weekly, second half-year.

Undergraduate Courses.

Major Course.

Determinants.

Four hours weekly, until October 19. Professor HULBURT.

Differential and Integral Calculus (special topics).

Four hours weekly, October 23 to December 21. Professor HULBURT.

Elementary Theory of Equations.

Four hours weekly, January 2 to February 1. Professor HULBURT.

Elements of Projective Geometry.

Four hours weekly, February 5 to March 29. Professor HULBURT.

Analytic Geometry of Three Dimensions.

Four hours weekly, April 11 to the end of the year. Professor HULBURT.

Minor Course.

Analytic Geometry.

Four hours weekly, until December 21. Professor HULBURT.

Differential and Integral Calculus.

Four hours weekly, January 2 to the end of the year. Professor HULBURT.

For Candidates for Matriculation.

Algebra (special topics); Solid Geometry; Plane Trigonometry;

Analytic Geometry (straight line and loci).

Four hours weekly, through the year.

Elective Course.

Differential Equations.

Two hours weekly, through the year. Dr. COHEN.

This course presents the elementary principles of Ordinary and Partial Differential Equations, and affords to students of Physics, Astronomy, and Electricity a necessary working knowledge of the subject. Much time is devoted to the solution of problems.

PHYSICS.

Advanced Courses.

Professor ROWLAND will lecture on—

Electricity and Magnetism.

Four hours weekly, through the year.

These lectures constitute one-half of a complete course, which extends through two years. In the year 1901-1902 the lectures will be on Heat Conduction and Physical Optics.

Professor AMES will direct the *Physical Seminary*, which meets once a week through the year, and to which only the most advanced students are admitted. During the first-half of the year, the subject of the Fundamental Experiments of Physics will be considered in the Seminary; and that of Physical Optics during the second.

Professor AMES will also lecture on—

Thermodynamics and Electrical Oscillations.

Two hours weekly, through the year.

These lectures are designed to be introductory to Professor Rowland's course, and students should take them during their first graduate year. They form part of a systematic course on Mathematical Physics, which extends through three years.

For all the advanced lectures a thorough knowledge of analytic geometry of three dimensions and of differential equations is necessary.

Dr. DORSEY will hold recitations and conferences on the above lectures.

Once a week, through the year.

Dr. DORSEY will also direct the work in the astronomical observatory.

Mr. WHITEHEAD will lecture on—

Special Topics in Applied Electricity.

Two hours weekly, through the year.

This course will be accompanied by tests and laboratory experiments.

Dr. L. A. BAUER will give a special course of lectures on The Magnetism of the Earth.

For courses in Geological Physics and in Physical Chemistry, the programmes in Geology and in Chemistry may be consulted.

Laboratory Work.

Advanced students are expected to give as much of their time as possible to laboratory work. This consists at first in performing experiments which are designed to familiarize them with laboratory methods and with the use of instruments for exact measurements. When sufficient experience of this kind has been acquired, they undertake, under the guidance of the instructors, some research designed to be of permanent value.

Journal Meetings.

The instructors meet once a week with the advanced students for the reading and discussion of the current physical journals.

Among the journals on which reports are regularly given are the following: The Philosophical Magazine, The American Journal of Science, The Physical Review, The Astrophysical Journal, Wiedemann's Annalen and Beiblätter, Zeitschrift für physikalische Chemie, Journal de Physique, Annales de Chimie et de Physique, Nature, Comptes Rendus, London Electrician, the Proceedings of the Royal Society of London and of many other societies.

Collegiate Courses.

These courses are designed for undergraduates and for those graduate students who wish to extend their knowledge of Physics, but are not prepared for more advanced work.

First Year (Minor Course.)

1. Lectures and recitations on General Physics.

Four hours weekly, through the year. Professor AMES.

2. Laboratory Work.

Three hours weekly, through the year. Dr. BLISS and assistants.

This course does not assume that the student has had any previous acquaintance with physics; but he is supposed to know how to use logarithms and to have had thorough instruction in plane trigonometry.

Second Year (Major Course.)

1. Lectures and recitations on the following subjects:

Mechanics, including some simple problems in the motion of rigid and elastic bodies.

Elementary Thermodynamics.

Electricity and Magnetism.

Physical Optics.

Four hours weekly, through the year. Professor AMES.

2. Laboratory Work.

Five hours weekly, through the year. Professor AMES and Dr. BLISS.

This course presupposes at least one year's previous work in physics, and an accurate knowledge of analytic geometry of two dimensions and the calculus. It will be in the main a continuation and extension of the First Year Course, special attention being given to the description and discussion of the experiments on which the science of Physics rests.

The laboratory work of both courses accompanies the lectures throughout the year, and is largely quantitative, being designed to impress the principles of the subject and to impart experimental skill. In the second year, therefore, problems presenting greater difficulties, either experimental or theoretical, are assigned. Written reports of the work are required of all the students.

CHEMISTRY.

The courses in Chemistry are intended to meet the wants (1) of graduate students who make Chemistry their specialty, or who select it as one of their subordinate subjects for the degree of Doctor of Philosophy; and (2) of undergraduate students, who study Chemistry for general training, or as a preliminary to the study of medicine. The first and second years' courses cover the ground of General Chemistry, as far as it is possible to do so in the time occupied. Together they form the full course designed for undergraduates. Graduates, including those who intend to enter the Medical School, who have not done an equivalent amount of work, will follow such parts of these courses as may seem desirable.

Advanced Work for Graduate Students.

Laboratory.

Under the direction of Professors REMSEN and MORSE and Associate Professor JONES. *Daily, except Saturday, from 9 a. m. to 5 p. m.*

The work will consist in a thorough study of analytic methods in making typical preparations especially of compounds of carbon, in practice in the methods of physical chemistry, and in carrying on investigations.

Lectures.

(a) Compounds of Carbon, by Professor REMSEN. *Five times weekly, through the year.*

(b) Historical Topics, under the direction of Professor REMSEN, by advanced students. *About twelve lectures, second half-year.*

This work, while serving to familiarize students with chemical literature, is intended to aid them in acquiring the art of presenting subjects in the form of lectures before audiences. All those who intend to become teachers of Chemistry, are expected to take active part in the work.

(c) Physical Chemistry, by Associate Professor JONES. *Three times weekly, through the year.*

(d) The Elements of Physical Chemistry, by Associate Professor JONES. *Twice weekly, first-half year.*

Journal Meetings.—The instructors and advanced students will meet weekly, on Mondays at 9 a. m., and at such other hours as may be appointed, for the purpose of hearing reports on the principal articles contained in the journals of Chemistry.

The journals read and regularly reported on are: Annalen der Chemie, Berichte der deutschen chemischen Gesellschaft, Journal of the Chemical Society (London), Journal für praktische Chemie, Zeitschrift für analytische Chemie, Zeitschrift für physikalische Chemie, American Chemical Journal, Journal of the Society of Chemical Industry, Bulletin de la Société chimique, Annales de Chimie et de Physique, Zeitschrift für anorganische Chemie, and occasionally others.

Collegiate Courses.

Minor Course.

(a) Introduction to General Chemistry.

Lectures and recitations, four hours weekly, through the year, by Professor RENOUF and Dr. GILPIN.

(b) Laboratory Work.

Five to six hours weekly, through the year, under the direction of Professor RENOUF and Dr. GILPIN.

No previous knowledge of Chemistry is required. The class-room work is based on Remsen's Chemistry (Brief Course), and covers the field of inorganic chemistry, as far as possible. The last twenty class-room exercises give a sketch of organic chemistry, particularly for the benefit of those students whose study of chemistry is confined to the minor course. In the laboratory the student repeats the experiments performed in the class room, and, in addition, has some practice in simple qualitative and quantitative analysis. Each student is required to keep a note-book of his work.

Major Course.

(a) Advanced Inorganic Chemistry.

Lectures and recitations, four hours weekly, until Christmas, by Professor MORSE.

(b) Chemistry of the Compounds of Carbon.

Lectures and recitations, four hours weekly, from January 2 to the end of the year, by Professor MORSE.

(c) Laboratory Work.

Five to six hours weekly, through the year, under the direction of Professor RENOUF.

The class-room work in inorganic chemistry, in the major course, is confined to a study of the metallic elements and to analytical chemistry. The laboratory work until January is systematic qualitative analysis; from January to the end of the year, the making of inorganic and organic preparations. The compounds to be made are so chosen that the student may become acquainted with as many classes and methods as possible. The text-books used are Remsen's Inorganic Chemistry (advanced course), Remsen's Organic Chemistry, and Renouf's Inorganic Preparations.

GEOLOGY.

The instruction in Geology is under the direction of Dr. WM. BULLOCK CLARK, Professor of Organic Geology, assisted by Dr. HARRY FIELDING REID, Associate Professor of Geological Physics, Dr. EDWARD B. MATHEWS, Associate Professor of Mineralogy and Petrography, Dr. GEORGE B. SHATTUCK, Associate in Physiographic Geology, and Dr. OLIVER L. FASSIG, Instructor in Meteorology.

An important course of lectures will be given by Mr. BAILEY WILLIS, of the United States Geological Survey, Lecturer on Stratigraphic and Structural Geology, and briefer courses by Professor CLEVELAND ABBE, of the United States Weather Bureau, Lecturer on Meteorology, and Dr. L. A. BAUER, of the United States Coast and Geodetic Survey, Lecturer on Terrestrial Magnetism.

Courses are offered to both graduates and undergraduates. In the case of graduate students, the work is arranged to meet the wants (1) of those who desire to make Geology their principal subject for the degree of Doctor of Philosophy, and (2) of those who wish to select certain courses in Geology for one or both of their subordinate subjects, the major subject being taken in another department. Special arrangements may also be made by graduate students whose time is limited, or who desire to devote their attention to particular courses without reference to a degree.

In the case of undergraduate students, Geology may be taken either as one of the major or as one of the minor courses for the degree of Bachelor of Arts.

The courses in Geology consist of lectures, laboratory and field work, and conferences upon topics of current literature. Great importance is attached to laboratory training as a part of the geological course, and facilities are given for daily work from 9 a. m. to 5 p. m.

LECTURE COURSES.

1. General Geology, by Professor Clark and Dr. Shattuck. *Four times weekly.*
2. Paleontology, by Professor Clark. *Twice weekly.*
3. Historical Geology, by Professor Clark. *Twice weekly.*
4. Experimental Geology, by Associate Professor Reid. *Twice weekly, first half-year.*
5. Geological Physics, by Associate Professor Reid. *Twice weekly, second half-year.*
6. Exploratory Surveying, by Associate Professor Reid. *Twice weekly, for one-third year.*
7. General Mineralogy, by Associate Professor Mathews. *Four times weekly.*
8. Advanced Mineralogy, by Associate Professor Mathews. *Three times weekly.*
9. Petrography, by Associate Professor Mathews. *Three times weekly.*
10. Physiographic Geology, by Dr. Shattuck. *Weekly.*
11. Climatology, by Dr. Fassig. *Twice weekly, for one-third year.*
12. Stratigraphic and Structural Geology, by Mr. Willis. *Twice weekly, for one-third year.*
13. Meteorology, by Professor Abbe.
14. Terrestrial Magnetism, by Dr. Bauer.

LABORATORY WORK.

Laboratory courses are arranged to accompany the lectures, while advanced or special students will be given the opportunity to carry on fuller investigations upon either described or new materials.

CONFERENCES AND STUDENT LECTURES.

In order that the advanced students may be kept in touch with the most recent investigations in the science, conferences are held at which the leading journals in geology are reviewed by the students under the direction of the instructors. The conferences take place bi-weekly.

In order that the advanced students may also have the experience necessary for the successful preparation and delivery of class-room lectures, a course upon some phase of geology is arranged, a special topic being assigned to each student. The lectures take place bi-weekly, alternating with the conferences.

FIELD WORK.

The area of the State of Maryland includes, notwithstanding its comparatively small size, a remarkable sequence of geological formations. The ancient rocks of the earth's crust, as well as those still in the process of deposition, are found, while between these wide limits there is hardly a geological epoch which is not represented. As a result, most excellent facilities are afforded for a study of the various geological horizons.

GEOLOGICAL CAMP.

Arrangements are made annually for a geological encampment of several weeks after the close of the class-room lectures at the University.

GEOLOGICAL LABORATORY AND LIBRARY.

The Geological Laboratory is situated in Hopkins Hall, and comprises over thirty rooms, large and small. Here are placed the library, apparatus and collections, which are accessible to the student daily, from 9 a. m. to 5 p. m.

In accordance with the custom of the University, those books relating to the work of the geological department are given into its charge, the books of general reference being retained in the University Library.

The library of the geological department contains a good representation of the leading journals and works of reference upon geological subjects. It is greatly enriched by the Williams, Lewis and Abbe libraries. Extensive series of topographical and geological maps likewise form a portion of the library, and these are constantly increasing in number.

APPARATUS AND COLLECTIONS.

The collections of the department consist primarily of a large amount of important material brought together from Maryland and adjacent States. It represents all the horizons of the State, being especially rich in crystalline rocks, and in Cretaceous and Tertiary fossils. Some of this material has been already described, while much awaits further study.

Among the most important of the special collections are:

The Williams collection of rocks and minerals, the Lewis collection of rocks and thin sections, the Krantz collection of fossils, the Hill collection of rocks and characteristic fossils from the Cretaceous formations of Texas, and the Stürtz, the Lehmann, and the Allen collections.

STATE SCIENTIFIC BUREAUS CONNECTED WITH THE GEOLOGICAL DEPARTMENT.

Two scientific bureaus, established by the Legislature and maintained at the expense of the State, are carried on in connection with the geological department. They are the Maryland Geological and Economic Survey and the Maryland State Weather Service. Professor Clark is in charge of both of these organizations, which are concerned with a study of the geology and physical features of the State of Maryland. A sum of \$27,000 annually is appropriated by the State for these bureaus.

THE BIOLOGICAL SCIENCES.

The courses in the Biological Sciences are designed (1) for students who wish to make Zoology, Botany, Animal Physiology, Anatomy, or Pathology a subject of advanced study and research, or the principal or a subordinate subject for the degree of Doctor of Philosophy; (2) for graduates in medicine who desire special courses in one or more of these subjects; (3) for undergraduates who desire some knowledge of the biological sciences as part of a liberal education; and (4) for undergraduates who desire to prepare themselves for the study of medicine.

The various laboratories are open daily during the session from 9 a. m. to 5 p. m. The work is conducted under the direction of the professors in the different departments.

Graduate Courses.

ZOOLOGY AND BOTANY.

The work in Zoology and Botany is directed by Dr. W. K. Brooks, Professor of Zoology, assisted by Dr. E. A. Andrews, Associate Professor of Biology, Dr. D. S. Johnson, Associate in Botany, Dr. B. W. Barton, Lecturer in systematic Botany, and other assistants.

1. Professor Brooks will conduct the following courses, with the assistance of Dr. Andrews and Dr. Johnson.

Advanced laboratory work in Zoology.

Daily, throughout the year.

History of Zoology.

Weekly, from January to the end of the year.

Zoological Journal Club.

Weekly, until April 1, for the discussion of the current literature of Zoology.

Zoological Seminary.

Weekly, from the beginning of the session, until April 1.

2. Dr. Andrews will give a course of twelve lectures on Proto-plasm, in November and December.

3. Dr. Johnson will conduct the following courses:

The Comparative Morphology of the Vegetable Kingdom.

Two lectures and two laboratory exercises weekly, throughout the year.

Physiology and Histology of Plants.

Two exercises a week, throughout the year.

Botanical Journal Club.

Weekly, throughout the year.

Botanical Seminary.

Weekly, throughout the year.

PHYSIOLOGY.

The following courses in Physiology are offered to graduate students:

1. By Professor Howell:

Work leading to the degree of Doctor of Philosophy, with Physiology as the principal subject.

This work includes lectures, laboratory methods, research, and attendance upon the meetings of the physiological seminary and journal club.

2. By Professor Howell and Dr. Dreyer:

Work leading to the degree of Doctor of Philosophy, with Physiology as a subordinate subject. Two courses are offered, either of which will be accepted as absolving the conditions for a subordinate subject. Either course may be taken by graduate students, without reference to a degree.

(a) The course given to medical students, consisting of about three lectures weekly throughout the year, and laboratory work, six hours weekly, from October to January. This course is given in the mornings.

(b) An afternoon course consisting of lectures and laboratory work, three afternoons weekly, from January to June.

3. By Professor Howell:

Physiological Journal Club.

Weekly, throughout the year.

4. By Professor Howell:

Physiological Seminary.

Weekly, throughout the year.

Special lectures on selected topics in Physiology, by members of the staff or advanced students, are given occasionally as part of the Seminary work.

5. By Professor Howell and Dr. Dreyer:

Advanced laboratory work in Physiology, methods of demonstration and research.

This course is intended for those who have completed elementary courses in Physiology. The work is done individually.

ANATOMY.

The various courses given in the department of Anatomy are open to graduate students. In addition, opportunities are afforded for advanced work and original investigation. A general outline of the work of the department follows:

I. Systematic instruction in histology, microscopic anatomy, and neurology by Dr. Bardeen, Dr. Knower, and Dr. Sudler, from October 1 to March 15, mornings.

II. Systematic instruction in gross human anatomy by Professor Mall and Dr. Harrison, from October 1 to March 15, afternoons.

III. Advanced work and original investigation under the direction of Professor Mall, Professor Harrison, and Dr. Bardeen, daily, during the academic year.

NOTE.—A more detailed description of the work outlined above will be found in the Announcement of the Johns Hopkins Medical School.

PATHOLOGY.

The courses in Pathology are designed primarily for students of medicine. Those in Bacteriology or those in General Pathology, Pathological Histology, and Pathological Anatomy are available as a subordinate subject for the degree of Doctor of Philosophy.

The following courses are offered:

1. The conduct of Autopsies. Professor Welch and Dr. MacCallum.
2. Demonstrations in Gross Morbid Anatomy. Professor Welch and Dr. MacCallum.
3. Bacteriology. Professor Welch and Dr. Harris. October 1 to Christmas. This is a practical laboratory course familiarizing the student with bacteriological technique and with the characters of the important pathogenic micro-organisms.
4. Lectures on Infection and Immunity. Professor Welch. Once or twice a week, October 1 to Christmas.
5. General Pathology. Professor Welch and Drs. MacCallum, Opie, and Marshall. Demonstrations, experiments, laboratory work, and lectures, after January 1.
6. Pathological Histology and Pathological Anatomy. Professor Welch and Drs. MacCallum, Opie, and Marshall. January 2 to June 1. Laboratory course, three afternoons a week.
7. Lectures on Special Topics in Pathology.
Once a week, January 2 to June 1. Professor WELCH.
8. Recitations.
Once a week, throughout the year. Professor WELCH.
9. Special course in Bacteriology for Physicians.
Three forenoons a week. May and June. Dr. HARRIS.
10. Special course in Pathology for Physicians.
Three afternoons a week. May and June. Dr. MACCALLUM.
11. Lectures for Physicians attending Graduate Courses.
Once a week. May and June. Professor WELCH.
12. Advanced Work and Special Research. Opportunity is afforded those suitably trained to pursue advanced work and special research in Pathological Anatomy and Histology, Experimental Pathology, and Bacteriology. For these purposes the pathological laboratory is well equipped with the necessary apparatus and material.

For more detailed information consult the Annual Announcement of the Johns Hopkins Medical School.

Herbaria.

Captain John Donnell Smith, of Baltimore, has kindly consented to allow students to avail themselves of the opportunities offered in his private herbarium, which includes some 78,000 sheets of specimens from all parts of the world, and which is especially rich in its representation of the Flora of the United States and of the American tropics. He has also offered to special students the privilege of consulting his extensive botanical library.

Students of Botany have access also to the Schimper collection of European phanerogams, the Fitzgerald collection of mosses, and the local collection of the Baltimore Naturalists' Field Club.

Library Facilities.

A working library of monographs and periodicals for students of Zoölogy and Botany is contained in the Biological Laboratory of the University. A similar library for students of Physiology, Anatomy, and Pathology is provided in the building of the Medical School.

The general library of the University receives all the chief journals of general science, and the transactions of the leading learned societies of the world.

The library of the Peabody Institute, within five minutes' walk of the University, contains complete sets of many of the chief biological journals, of the proceedings of learned societies, and other works of reference.

In the libraries of the Medical and Chirurgical Faculty of Maryland and the Johns Hopkins Hospital a large number of medical periodicals are accessible to members of the University.

Publications.

The University Circulars and the Hospital Bulletins provide for the prompt publication of abstracts of re-carches, or parts of researches, as soon as they are completed and ready for publication.

From time to time extensive memoirs of investigations in Zoölogy are issued by the University Press in a series of illustrated quarto Morphological Monographs.

Collegiate Instruction.

The regular undergraduate instruction in normal biology extends over two years. The first year constitutes a *minor course* and may be taken separately.

Special students, who are not graduates or matriculates, may enter the courses for undergraduates, on giving satisfactory evidence of fitness.

In addition to valuable training of the powers of observation and thought, the courses in Biology present the science of life in its most fundamental aspects, and thus serve as a basis for the study of the phenomena of human existence dealt with in History, Political Economy, Psychology, and Ethics. They are open to all students, no previous training being required; and they will be found useful to those looking forward to a career in the ministry, to those designing to enter the medical profession, and to all who are interested in Natural History. In addition to the regular courses, the excursions of the Naturalists' Field Club, which are open to all, afford opportunities for a less formal study of Nature.

Minor Course.

(Required of all who wish to enter the medical school.)

General Biology.

Five to six hours laboratory work and four lectures and exercises weekly, through the year. Associate Professor ANDREWS, with the aid of Dr. BARTON and laboratory assistants.

In the laboratory, the student studies, with the aid of the microscope and dissections, the life-history and structure of certain animals and plants; the skeletons of man and animals; the development of the frog and the fowl; and the elements of systematic botany. In the lecture room, fundamental facts and laws are emphasized.

Major Course.

This course is designed for those who intend to teach zoölogy; for those who look forward to advanced studies in zoölogy; for those who desire an acquaintance with the elements of zoölogy, and with comparative anatomy and embryology, as a part of a liberal education, and for those students who, having completed the minor course in biology, preliminary to medicine, desire a wider acquaintance with the animal kingdom.

1. Laboratory work in Zoölogy, Comparative Anatomy, and Embryology.

Six hours a week throughout the year. Professor BROOKS and Dr. ANDREWS and laboratory assistants.

2. Elementary Zoölogy.

Two lectures a week until April 1. Professor BROOKS.

3. Elementary Botany.

Two lectures a week until April 1. Dr. JOHNSON.

4. Embryology.

From April 1 to the end of the session. Associate Professor ANDREWS.

Systematic Botany.

An introduction to systematic Botany, given by Dr. BARTON in April and May, is open to any student, without previous training, as an equivalent of part of the course in free-hand drawing.

GREEK.

Greek Seminary.

Professor GILDERSLEEVE will conduct the Greek Seminary, the plan of which is based on the continuous study of some leading author or some special department of literature.

The Seminary consists of the Director, Fellows, and Scholars, and such advanced students as shall satisfy the Director of their fitness for an active participation in the work by an essay, a critical exercise, or some similar test of attainments and capacity. All graduate students however, may have the privilege of attending the course.

During the next academic year the study of The Attic Orators will constitute the chief occupation of the members. There will be two meetings a week during the entire session. Especial attention will be paid to the development of language and style and to the antique canons of aesthetic criticism. The rhetorical works of Dionysios of Halikarnassos will be studied in connection with this course.

The student should possess the text of the orators (Teubner ed.), and the rhetorical works of Dionysios of Halikarnassos, the first volume of which has been edited by Usener and Radermacher. Blass's *Geschichte der Attischen Beredsamkeit* is an important auxiliary, Volkmann's *Rhetorik* will be found serviceable, and Jebb's *Selections from the Attic Orators* may be recommended as an introduction to the study. The various editions of select speeches of Demosthenes by Sandys are also helpful.

Advanced and Graduate Courses.

1. Professor Gildersleeve will also conduct a course of Practical Exercises in Greek, consisting chiefly in translation at dictation from Greek into English and English into Greek, two meetings a week, from the beginning of the session to the first of January.

2. He will lecture on Greek Elegiac and Iambic Poetry, with illustrative readings, once a week after January 1.

3. He will also lecture on select chapters of Greek Syntax in its relation to style.

4. Associate Professor Miller will conduct readings auxiliary to the main study of the graduate students in Greek, twice a week throughout the session.

Notice of other courses is reserved.

Undergraduate Courses.

For Candidates for Matriculation.

Homer, *Iliad* (book vi); Herodotus (book vii); Night Reading; Prose Composition.

Three hours weekly, through the year. Associate Professor MILLER.

Minor Course.

Lysias, vii, xii.

Three hours weekly, first half-year. Associate Professor SPIEKER.

Private Reading: Xenophon, *Hellenica* (book i).

Plato, *Apology*; Euripides (one play).

Three hours weekly, second half-year. Associate Professor SPIEKER.

Private Reading: Homer, *Odyssey* (books i, ix, x).

Prose Composition.

Weekly, through the year. Associate Professor SPIEKER.

Major Course.

Demosthenes, *Oratio in Leptinem*.

Three hours weekly, first half-year. Associate Professor SPIEKER.

Private Reading: Aeschylus, *Prometheus*.

Selections from the elegiac, melic, and iambic poets; Sophocles (one play).

Three hours weekly, second half-year. Associate Professor SPIEKER.

Private Reading: Aristophanes (one play).

Prose Composition.

Weekly, through the year. Associate Professor SPIEKER.

Elective Course.

Justin Martyr.

Two hours weekly, first half-year. Associate Professor SPIEKER.

LATIN.

Latin Seminary.

Associate Professor KIRBY FLOWER SMITH will conduct the Latin Seminary, the plan of which is similar to that followed in Greek. The department of literature to which it is proposed to devote especial attention during the next academic year, is the Latin Historians, and the centre of this work will be Livy and Tacitus. Two meetings a week throughout the year will be devoted to the critical interpretation of these authors, to various auxiliary studies, and to the reading of papers prepared by members of the Seminary.

It is advisable for students to read in advance as much as possible of Livy and Tacitus, and to provide themselves with complete texts of Caesar (Kübler, Teubner, Leipzig, 1895), Livy (Weissenborn-Müller, Teubner), Tacitus (Halm, 4th edition, Teubner), the "Historicorum Romanorum Fragmenta," edited by Peter (Teubner, 1883), Sallust (Jordan, Weidmann, Berlin, 1887), and Catullus, Tibullus, and Propertius (Haupt-Vahlen, 5th edition, Leipzig, Hirzel, 1885).

Advanced and Graduate Courses.

1. During the first half-year, Dr. Smith will lecture once a week on the Roman Historians, beginning with the earliest period.

2. Throughout the year he will lecture once a week on the Roman Elegy and Epigram.

3. He will also conduct a Journal Club, which will meet regularly to report and discuss recent publications in the field of Classical Philology.

4. Dr. H. L. WILSON will lecture once a week during the first half-year on Latin Epigraphy.

5. Once a week during the second half-year he will conduct a course in the interpretation of Latin Inscriptions.

6. During the second half-year Dr. SUTPHEN will lecture once a week on the *Sermo Cotidianus*.

7. He will also conduct a class, for advanced students, in the rapid reading of the Latin Historians.

The schedule given above is subject to additions and modifications.

Undergraduate Courses.

For Candidates for Matriculation.

Cicero, *De Senectute*; Sallust, *Catiline*.

Two hours weekly, first half-year. Dr. SUTPHEN.

Ovid, *Heroides*; Vergil, *Eclogues*.

Two hours weekly, second half-year. Dr. SUTPHEN.

Prose Composition.

Weekly, through the year. Dr. SUTPHEN.

Minor Course.

Livy (two books).

Three hours weekly, first half-year. Dr. SUTPHEN.

Private Reading: Caesar, *Bellum Civile* (book 1); Cicero, *De Amicitia*.

Horace (selections).

Three hours weekly, second half-year. Dr. SUTPHEN.

Private Reading: Ovid, *Fasti* (selections); Vergil, *Aeneid* (books IX, XII).

History of Roman Literature (with reading of selected passages).

Weekly, through the year. Associate Professor SMITH.

[For students in Group VI, as a substitute for Prose Composition.]

Prose Composition.

Weekly, through the year. Dr. SUTPHEN.

Major Course.

Juvenal; Martial.

Three hours weekly, first half-year. Dr. WILSON.

Private Reading: Pliny (select Letters).

Plautus; Terence.

Three hours weekly, second half-year. Dr. WILSON.

Private Reading: Plautus, *Miles Gloriosus*.

Prose Composition.

Weekly, through the year. Dr. WILSON.

Elective Course.

Selections from Tacitus.

Two hours weekly, second half-year. Dr. WILSON.

ORIENTAL SEMINARY.

Biblical Philology.

1. History of the Ancient East, with special reference to the Egyptian and Assyrian Monuments bearing on the Scriptures.
Professor JOHNSTON. *Friday, 10 a. m.*

2. Elementary Hebrew.
Professor HAUPT and Mr. BLAKE. *Monday, 2-4 p. m.*

3. Hebrew (Second Year's Course). Selected Chapters of the Historical Books.
Dr. GRIMM. *Two hours weekly, through the year.*

4. Exercises in Reading Hebrew at Sight, and in Reading Unpointed Hebrew Texts.
Professor JOHNSTON. *Two hours weekly, through the year.*

5. Prose Composition (Hebrew, Arabic, and Assyrian).
Professor HAUPT. *Wednesday, 3 p. m.*

6. Comparative Semitic Syntax.
Professor HAUPT. *Wednesday, 2 p. m.*

7. Old Testament Seminary: Critical Interpretation of the Book of Proverbs.
Professor HAUPT. *Tuesday, 2-4 p. m.*

8. Post-Biblical Hebrew: Selections from the Mishnah (*Abóth*, *Abodah zarah*) and the Talmud (*Shabbath*).
Dr. ROSENAU. *Friday, 2 p. m.*

9. The Talmud (lectures).
Dr. ROSENAU. *Monday, 5 p. m., during the first half-year.*

10. Medieval Jewish Philosophers (lectures).
Dr. ROSENAU. *Monday, 5 p. m., during the second half-year.*

Syriac and Ethiopic.

11. Syriac.

Dr. JOHNSTON. *Weekly, through the year.*

12. Ethiopic (The Book of Baruch).

Professor HAUPT. *Friday, 4 p. m.*

Arabic.

13. Elementary Arabic, with special reference to Students of Spanish.

Professor JOHNSTON. *Weekly, through the year.*

14. Arabic (Second Year's Course).

Professor JOHNSTON. *Weekly, through the year.*

15. Arabic Prose Composition.

Professor HAUPT. See No. 5.

Assyriology.

16. Elementary Assyrian.

Professor JOHNSTON.

17. Assyrian Historical Texts.

Professor JOHNSTON. *Two hours weekly, through the year.*

18. Assyrian Prose Composition.

Professor HAUPT. See No. 5.

19. Babylonian Nimrod Epic.

Professor HAUPT. *Wednesday, 4 p. m.*

20. Sumerian Bilingual Hymns and Psalms.

Professor HAUPT. *Tuesday, 4 p. m.*

Egyptology.

21. Old Egyptian (Hieroglyphic): Third Year's Course.

Professor JOHNSTON. *Weekly, through the year.*

22. Later Egyptian (Hieratic).

Professor JOHNSTON. *Weekly, through the year.*

23. Coptic (Second Year's Course).

Professor JOHNSTON. *Weekly, through the year.*

Eastern Asia.

24. The Philippine Islands (lectures).

Professor HAUPT. *Friday, 5 p. m., during the second half-year.*

SANSKRIT AND COMPARATIVE PHILOLOGY.

The following courses, in charge of Professor BLOOMFIELD, may be stated under two heads:

A. Indian Philology.

1. Vedic Seminary: The Rig-Veda, in relation to the religion and institutions of the early Indian period.

Weekly (1½ hours), through the year.

2. Selections from the ritualistic Sūtras, along with the hymns recited in the course of their practices.

Weekly, through the year.

3. Selections from the Hitopadeśa and the law-book of Manu (second year's course in classical Sanskrit).

Twice a week, first half-year.

4. The elements of Vedic Philology: Vedic grammar, metres, and interpretation of selected hymns.

Weekly, second half-year.

5. Beginners' course in Sanskrit: grammar (Whitney's Sanskrit Grammar), and interpretation of an easy text (Lanman's Reader).

Twice a week, through the year.

B. Linguistic Science and Comparative Grammar of the Indo-European Languages.

6. The Elements of Linguistic Science, with an introductory account of the Ethnology of the Indo-European peoples.

Weekly, through the year.

7. Comparative Grammar of Greek, Latin, German and Sanskrit: The history of Indo-European noun-formation.

Weekly, through the year.

8. Introduction to the Lithuanian language and literature.

Weekly, through the year.

No knowledge of Sanskrit is required for any of the courses under B. Course 6 sketches briefly the history of the science of language; presents a concise account of the ethnological history of the Indo-European (Aryan) peoples; deals with the fundamental question of growth and change in language; and finally treats of the origin of language. Course 7 is intended as an introduction into the most elementary methods and results of the comparative grammar of the more important Indo-European languages. Course 8 is recommended especially to students of the Teutonic languages.

ENGLISH.

A.

Professor BRIGHT will conduct the following courses:

I.

English Seminary.

Graduate students are admitted to the Seminary as soon as they have satisfied initial requirements for independent research. The discipline of the Seminary is designed to impart training in scholarly methods of dealing with literary and linguistic problems. Study and investigation are bestowed upon selected periods of literary history, upon departments of literature extending through successive periods, and upon the works of important writers, separately or in groups. Usually there is a change of subject each half-year.

During the academic year beginning October 1, 1900, the Seminary will be engaged in the study of the Literature of the Fourteenth Century.

The meetings of the Seminary will occupy four hours a week. *Tuesdays and Thursdays, 3-5 p. m.*

II.

Lectures on Anglo-Saxon and Middle English Grammar. *Thursday 12 m., first half-year; Wednesday, 4 p. m., second half-year.*

The principal works to be studied in connection with these lectures are: F. Kluge, *Geschichte der englischen Sprache*, Strassburg, Trübner, 1899; Ferd. Dieter, *Laut- und Formenlehre der altgermanischen Dialekte*, Leipzig, Reisland, 1898; Max Kaluza, *Historische Grammatik der englischen Sprache*, Berlin, Felber, 1900; L. Morsbach, *Mittelenglische Grammatik*, Halle, Niemeyer, 1896; K. Luick, *Untersuchungen zur englischen Lautgeschichte*, Strassburg, Trübner, 1896; ten Brink und Kluge, *Chaucers Sprache und Verskunst*, Leipzig, Tauchnitz, 1899.

III.

The Interpretation of Texts: (a) The Anglo-Saxon version of Bede's *Ecclesiastical History of England*. *Monday, 11 a. m., first half-year; (b) The Anglo-Saxon poem Guthlac. Monday and Tuesday, 12 m., second half-year.*

Students will be required to provide themselves with Schipper's edition of Bede (*Bibliothek der angelsächsischen Prosa*. Band 4. Leipzig, Wigand, 1897-9).

IV.

The English Journal Club (*fortnightly, two hours*), for reports on the current journals, reviews of new books, and the presentation and discussion of original papers on linguistic and literary subjects.

V.

An introductory course in Anglo-Saxon, with Bright's Anglo-Saxon Reader as the text-book. *Monday and Wednesday, 12 m.*

B.

Professor BROWNE will give the following courses in English Literature:

VI.

A general course covering the whole field, from the 7th to the 19th century. The study, of course, is synoptical; but emphasis is laid upon the chief writers and most important periods. Arnold's *Manual of English Literature* is used as a text-book. *Wednesday and Thursday, 1 p. m.*

VII.

A course in the writers of the 12th, 13th, and 14th centuries (from the Peterborough Chronicle to Chaucer). The texts are read from Morris and Skeat's *Specimens*, the students beginning with the easier and proceeding to the more difficult. In addition to the knowledge thus acquired of an interesting and formative period of our literature, this introduction to the early forms of the language will be found a helpful prodomus to the study of Anglo-Saxon. *Monday and Tuesday, 1 p. m.*

VIII.

A course in the writers of the Elizabethan period. The origin and development of the English drama will be traced from its earliest recorded beginnings down to Shakespeare, the representative of its highest perfection, and in its decadence in the later Jacobean dramatists. *Tuesday, 12 m., first half-year.*

IX.

A course in the literature of the eighteenth century, *Tuesday, 12 m., second half-year.*

X.

The Early Scottish Poetry from Barbour (A. D. 1350) to Lyndsay (A. D. 1550) will be studied by the aid of a chrestomathy especially prepared for this class. A course of historical and critical lectures will be given concurrently with the readings. *Friday, 12 m.*

XI.

Lectures for advanced students on the Transformations of English Prose, and on another subject to be announced later. *Wednesday, 11 a. m.*

C.

Professor GREENE will give the following courses in Rhetoric and in English Literature:

XII.

Rhetoric and English Composition. Theory, based upon text-books, lectures, and discussions; critical study of prose writers;

frequent practice in writing. *Monday, Tuesday, and Wednesday, 12 m.*

XIII.

English Literature. Outline history, with special study of the more important writers. *Monday, 9 a. m., Tuesday, 10 a. m., Wednesday, 11 a. m.*

XIV.

The study of two contrasted periods:—(a) From the Restoration to the death of Pope (1660–1744); the work will centre upon the writings of Dryden, Steele, Addison, Swift and Pope. (b) From the publication of the *Lyrical Ballads* to the death of Coleridge (1798–1834); the work will centre upon the writings of Wordsworth, Coleridge, Keats, Shelley, and Byron. *Twice weekly.*

NOTE—Courses I–IV, XI are for graduate students.

Courses VI and VII constitute the "English Minor," and V, VIII, IX, and X the "English Major," of Group VII.

Course XII is prescribed for all college students during their first year; XIII is prescribed for the second year; and XIV is elective in the third year.

GERMAN.

German Seminary.

The German Seminary will be conducted by Professor WOOD. During the first half-year the period in German Literature from Goethe's Italian journey (1786) to the death of Schiller (1805) will be studied. The subjects to receive special attention will be: Goethe's period of pronounced classical sympathies; Schiller's influence upon Goethe and their contemporaries in the direction of subjectivism in poetry; and Goethe's subsequent return to the national point of view in later works. During the second half-year the *Parzival* of Wolfram von Eschenbach will be studied. The third, fifth, and ninth books, with other selected passages, will be read, and Wolfram's relation to the Grail legend discussed. Particular attention will be paid to the epic style in *Parzival*, as compared with *Titivel* and with *Willehalm*. The Seminary will meet three times weekly, through the year.

Students are requested to procure Lachmann's edition (4. Ausgabe, Berlin, 1879) of *Wolfram von Eschenbach*.

The Germanic Society, which is composed of the Director of the Seminary, the Instructors, and the Graduate Students in German, will meet fortnightly on Friday, 4–6 p. m. The members will report upon the contents of current journals, and present, in turn, papers upon subjects connected with the work of the year, or assigned for investigation.

Graduate Courses.

Professor WOOD will conduct the following courses:

1. Gothic and the Elements of Comparative German Grammar. *Twice weekly, through the year.*

Braune, *Gotische Grammatik*, 4. Auflage, Halle, 1895; Kluge, *Vorgeschichte der altgermanischen Dialekte* (Sonderabdruck aus der 2. Auflage von Paul's *Grundriss der germanischen Philologie*), Strassburg, 1897; Heyne's *Urilas*, 9. Auflage, von F. Wrede, Paderborn, 1896.

2. History of German Literature in the Eighteenth Century. *Twice weekly, first half-year.*

After a review of the Second Silesian literary movement, the critical reforms at the close of the Seventeenth century will be considered in detail, after which a series of representative Eighteenth century works will be read, extending to the publication of Goethe's *Götz von Berlichingen* (1773). French and English influence will be considered, as an accessory, but the point of view for the whole course will be the inner development of German literature and style in the periods named.

3. History of Metre in Middle High German. Lectures. *Twice weekly, second half-year.*

The metrical forms transmitted from Old High German will first be considered, after which the foreign influence and the resulting complexity of verse forms in the first classical period of German Literature (12th–13th century) will be studied. The history of ascertainable facts, and the collection and consideration of a trustworthy body of metrical material, derived from the monuments themselves, will be the chief object in view, rather than a formal discussion of modern theories; but examples and illustrations will, wherever possible, be drawn from later periods.

Dr. B. J. VOS, Associate Professor of German, will give the following courses:

4. Middle High German: Introductory Course. *Twice weekly, first half-year.*

Michels, *Mittelhochdeutsches Elementarbuch*, Heidelberg, 1900; Henrici, *Proben der Dichtungen des Mittelalters*, Berlin, 1898; Lexer, *Mittelhochdeutsches Taschenwörterbuch*.

5. Kudrun: Interpretation and Criticism. *Twice weekly, first half-year.*

Students should provide themselves with Symons's edition of *Kudrun* (Halle, 1883).

6. Modern Dutch: Introductory course. *Twice weekly, second half-year.*

It is expected that an outline of the grammar, in mimeographed form, will be provided for the class. Material for reading will be drawn from contemporary literature.

Dr. T. S. BAKER will give the following course:

7. The History of the German novel in the Seventeenth Century. *Weekly, through the year.*

The development of the native German novel will be chiefly studied in the works of Grimmels-hausen, while Moscherosch will serve as a basis for the study of foreign influences.

Undergraduate Courses.

For Candidates for Matriculation.

Elementary German:

Thomas, *Practical German Grammar*; Vos, *Materials for German Conversation*; E. S. Buchheim, *Short German Plays*; Heyse, *L'Arrabbiata*.

Three hours weekly, through the year. Associate Professor Vos.

This course is intended for students who offer Greek for matriculation. Those who follow it are required to take Minor A in their groups.

Minor Course.

Class A:

Classics: Schiller, *Maria Stuart*; Goethe, *Hermann und Dorothea*. *Two hours weekly, through the year.* Associate Professor Vos.

Prose Readings: Baumbach, *Erzählungen und Märchen*; Chamisso, *Peter Schlemihl*.

Weekly, through the year. Associate Professor Vos.

Prose Composition.

Weekly, through the year. Professor WOOD.

Private Reading: Gutzkow, *Zopf und Schwert*.

Class B:

Otis, *Elementary German*; Brandt, *German Reader*; von Moser, *Der Bibliothekar*; von Wildenbruch, *Das edle Blut*; Goethe, *Egmont*; Prose Composition (E. S. Buchheim, *Elementary German Prose Composition*, Oxford, 1893); Whitney, *German Grammar*.

Four hours weekly, through the year.

Minor Course B is intended only for students who have matriculated in Greek, and have fully met at entrance the matriculation requirements; for such students, it absolves the requirements in German. Other students must absolve Minor A.

Major Course.

Drama.

Goethe, *Faust*. Professor WOOD. Schiller, *Wallensteins Lager*, *Die Piccolomini*. Mr. HOFMANN.

Two hours weekly, through the year.

History of German Literature: Classical Period.

Weekly, through the year. Associate Professor VOS.

Prose Composition.

C. A. Buchheim, *Materials for German Prose Composition*, Parts I and II, London, 1894.

Weekly, through the year. Professor WOOD and Mr. HOFMANN.

Private Reading: Schiller, *Wallensteins Tod*.

Elective Course.

Contemporary Literature, in Rapid Readings.

Works by Hauptmann, Sudermann, Ebner-Eschenbach, and von Wildenbruch are read

Two hours weekly, through the year.

This course is intended for students who have completed the equivalent of a Minor.

Special Courses.

Courses 1 and 2 are open to graduate students who already possess an elementary knowledge of German and wish to acquire greater fluency in reading. The first is intended for students in Languages, History, and Economics; the second, for students in the Natural Sciences. Successful completion of either course is accepted as an equivalent of the reading knowledge of German required of candidates for the degree of Doctor of Philosophy.

1. Historical German.

Seiler, *Die Heimat der Indogermanen*; Hoffmann's *Historische Erzählungen*; Lange, *Athen im Spiegel der aristophanischen Komödie*.

Twice weekly.

2. Scientific German.

Dippold, *Scientific German Reader*; von Helmholtz, *Über Goethe's naturwissenschaftliche Arbeiten*; Cohn, *Über Bakterien*.

Twice weekly.

This course is open also to undergraduate students who have completed the equivalent of a Minor in German.

3. Oral Exercises in German.

Twice weekly. Mr. HOFMANN.

This course is intended especially for students in the departments of modern languages, who lack an extended vocabulary and sufficient familiarity with written and spoken German. A thorough knowledge of the elements is presupposed.

ROMANCE LANGUAGES.

Advanced Courses.

I. With second- and third-year students:

Professor ELLIOTT.

(a). Seminary. *Twice weekly.*

The Fables of Marie de France; Work on Manuscripts.

(b). French Dialects. *Weekly.*

(c). Lectures on Dante. *Weekly.*

(d). Romance Club. *Weekly.*

Professor F. M. WARREN.

(e). French Lyric Poetry in the Middle Ages. *Twenty lectures in January and February.*

(f). The Romantic School. *Six public lectures.*

[I. J. J. Rousseau and his influence. II. Châteaubriand, Mme. de Staël. III. Nodier, Lamartine. IV. Victor Hugo. V. De Vigny, De Musset. VI. George Sand, A. Dumas père.]

Dr. HUGO P. THIEME.

(g). French Versification. *Twelve lectures.*

Associate Professor MARDEN.

(h). Spanish Seminary. *Twice weekly.*

The Poema de Fernan Gonzalez. Construction of a critical text based on the Escorial manuscript and several unpublished fragments of the poem.

(i). Spanish Philology. *Twice weekly.*

Gorra, *Lingua e Letteratura Spagnuola delle Origini*, Milan, 1898; Baist, *Die Spanische Sprache* (in Gröber's *Grundriss der Romanischen Philologie*, Vol. I, Strassburg, 1888); Meyer-Lübke, *Grammaire des Langues Romanes*, Vols. I, II, Paris, 1890, 1895.

Dr. BRUSH.

(j). Old French Readings. *Class A. Two hours weekly.*
With occasional lectures on the manners and customs of the Middle Ages: 1. Château Life; 2. The Tourney; 3. Hunting and Falconry.

First Semester: Early French Lyrics.

Texts:—*Romanzen u. Pastourellen*, Bartsch, Leipzig, 1870; *Les Plus Anciens Chansonniers Français*, Brakelmann, Paris, 1891, and continuation, Marburg, 1896.

Second Semester: The Romans d'Aventure.

Texts:—*Roman de la Rose ou de Guillaume de Dole*, Servois, Société des Anciens Textes Français, Paris, 1893; Gautier d'Arras: *Ille et Galeron*, Foerster, Romanische Bibliothek, Vol. VII, Halle, 1891; *L'Escoufle*, Michelant et Meyer, Société des Anciens Textes Français, Paris, 1894; *Le Chevalier à l'Épée*, Armstrong, Baltimore, 1900; also Jean de Meung and Guillaume de Lorris: *Le Roman de la Rose*, Michel, Paris, 1872.

This course will be adapted to students of the English Seminary who are studying fourteenth century literature.

II. With first-year students:

Professor ELLIOTT.

(a). Popular Latin. *Weekly.*

(b). French Physiological Phonetics. *Weekly.*

Passy, *Les sons du français*; Beyer, *Französische Phonetik*; Sweet, *Primer of Phonetics*; Vietor, *Elemente der Phonetik*; Michaelis and Passy, *Dictionnaire Phonétique de la Langue Française*.

Associate Professor MARDEN.

(c). Old Spanish Readings. *Weekly.*

Gorra, *Lingua e Letteratura Spagnuola delle Origini*, Milan, 1898;
Lidfors, *Los Cantares del Myo Cid*, Lund, 1895; Janer, *Poetas Castellanos anteriores al Siglo XV*, Madrid, 1864.

(d). Lectures on the Spanish Drama of the Seventeenth Century. *Weekly.*

Dr. BRUSH.

(e). Old French Phonology and Morphology. *Three hours weekly.*

Schwan-Behrens, *Grammatik des Altfranzösischen*, Leipzig, 1898;
Nyrop: *Grammaire Historique de la Langue Française*, Copenhagen-Paris-Leipzig, 1899; Meyer-Lübke: *Grammaire des Langues Romanes*, Paris, 1890-1900; Gröber: *Grundriss der Romanischen Philologie*, Vol. I, pp. 415-437, 561-668, Strassburg, 1888;
Suchier: *Le Français et le Provençal*, Paris, 1891; Darmesteter-Hatzfeld Thomas: *Dictionnaire Général*, Paris, (in course of publication).

(f). Old French Readings. *Class B. Weekly.*

Texts:—*Extraits des Chroniqueurs Français*, Paris et Jeanroy, 4e ed., Paris, 1898; *Extraits de la Chanson de Roland*, G. Paris, Boston, 1892 (Ginn & Co.); *Les Serments de Strasbourg*, *La Cantilène de Sainte Eulalie*, *La Vie de Saint Alexis*, Foerster u. Koschwitz, Altfranzösisches Uebungsbuch, Heilbronn, 1884; *Aucassin u. Nicolette*, Suchier, 5te Ausgabe, Halle, 1900; *Die Lais der Marie de France*, Warnke, Halle, 1885; G. Paris: *La Littérature Française au Moyen Age*, 2e ed., Paris, 1890.

Dr. OGDEN.

(g) The development of French literary criticism, especially in the nineteenth century. *Weekly.*

Dr. KEIDEL.

- (h). 1. Methodology of the Romance Languages.
2. Early Romance Printers. *Weekly, first half-year.*
(i). Paleography. *Weekly, second half-year.*

Dr. SHAW.

(j). The origins of Italian Prose Literature. *Weekly.*

Undergraduate Courses.

French: *Second Year (Major) Course.*

Literature. *Three hours weekly.* Dr. OGDEN.

First half-year. Nineteenth Century Prose—De Vigny: *Cinq Mars* (Heath); Gautier: *Le Capitaine Fracasse* (Jenkins); Balzac: *Eugénie Grandet* (Holt); Loti: *Selections—Le Mariage de Loti; Le Roman d'un Spahi; Mon frère Yves*, &c. (Holt); Zola: *La Débâcle* (Heath). Short talks and discussion of nineteenth century literature.

Second Semester. Classic Drama—Corneille: *Horace* (Holt); Racine: *Phèdre* (Heath); Molière: *Tartuffe* (Heath), *Le Misanthrope* (Heath). Short talks and discussion of the classic drama.

Lectures on French life and thought, based on the subject-matter read. Private Reading.

Prose Composition. Chardenal: *Advanced Exercises* (Hachette).

French: *First Year (Minor) Course: Class A. Four hours weekly.* Dr. OGDEN.

Distinctive periods of French Literature (seventeenth and nineteenth centuries). Illustration drawn from the classic and modern schools. Lectures and Recitations.

Texts:—Corneille: *Le Cid* (Heath); Molière: *Les Femmes Savantes* (Heath); Hugo: *Hernani* (Heath); Sandeau: *Mlle de la Seiglière* (Heath).

Contemporary French Drama.

Texts:—Dumas: *L'Ami des Femmes*; Scribe and Legouvé: *La Bataille des Dames* (Holt); De Musset: *On ne Badine pas avec l'Amour* (Hachette); Rostand: *Cyrano de Bergerac* (Holt).

Prose Composition and Syntax.

Texts:—Bevier: *Grammar*, with *Exercises* by Logie, and prose based on French texts.

Private Reading.

French: *First Year (Minor) Course: Class B.*

For undergraduates who have matriculated in Greek, and for graduates beginning French. *Four hours weekly.*

Mr. CRITCHLOW.

Texts:—Joynes: *Minimum French Grammar and Reader* (Holt); Malot: *Sans Famille* (Spiers: Holt); Erekman-Chatrion: *Le Cousin de 1813* (Heath); Mérimée: *Colomba* (Heath); Legouvé and Labiche: *La Cigale chez les Fourmis* (Heath); Augier and Sandeau: *Le Gendre de M. Poirier* (Heath); Paileron: *Le Monde où l'on s'ennuie* (Heath).

French: *Elementary Course.*

For candidates for matriculation who offer Greek. *Three hours weekly.* Dr. SHAW.

Texts:—Grandgent: *Essentials of French Grammar* (Heath); Super: *French Reader* (Heath); Enault: *Le Chien du Capitaine* (Heath); About: *Le Roi des Montagnes* (Heath); Loti: *Pêcheur d'Islande* (Heath).

French: *Elective Course.*

For students who have completed the equivalent of a Minor. *Twice weekly.* Dr. BRUSH.

Texts:—Bercy's *Contes et Nouvelles Modernes* (Jenkins); Augier: *La Pierre de Touche* (Ginn); Balzac: *Le Curé de Tours* (Heath); Scribe: *Le Verre d'Eau* (Macmillan); Hugo: *Selections* (Holt); Gautier, *Jettatura* (Heath); Storr: *Hints on French Syntax* (Heath).

Spanish: *Minor Course.*

Adapted for beginners. *Four hours weekly.* Associate Professor MARDEN.

Texts:—Manning's *Spanish Grammar*, New York (Holt & Co.); Exercises in grammar and prose composition; Matzke's *Spanish Reader*, Boston (Heath & Co.); Alarcón, *El Capitán Veneno*, Boston (Heath & Co.); Tamayo, *Un Drama Nuevo*, New York (Jenkins); Pérez Galdós, *Doña Perfecta*, Boston (Ginn & Co.); Clarke, *Spanish Literature*, New York (Macmillan & Co.).

Spanish: *Elective Course.*

Adapted for beginners. *Two hours weekly.* Associate Professor MARDEN.

Texts:—Edgren's *Spanish Grammar*, Boston (Heath & Co.); DeHaan's *Cuentos Modernos*, Boston (Heath & Co.); Palacio Valdés, *José*, Boston (Heath & Co.).

Italian: *Minor Course.*

Adapted for beginners. *Four hours weekly.* Dr. SHAW.

Texts:—Grandgent: *Italian Grammar* (Heath); Grandgent: *Italian Composition* (Heath); Bowen: *Italian Reader* (Heath); Snell: *Primer of Italian Literature* (Clarendon Press); Fogazzaro: *Daniele Cortis* (Galli); De Amicis: *La Vita Militare*; Barrili: *La Donna di Picche* (Groves); Goldoni: *Il Burbero benefico* (Clapiu: Castor); Un Curioso Accidente (Clapiu: Castor); Alfieri: *Oreste* (Clapiu: Castor); Tasso: First two cantos of *Gerusalemme Liberata* (Clarendon Press); Dante: *Inferno* (Bibl. Naz. Econ. Lemonnier); Boecaccio: *Decamerone* (Bibl. Class. Econ. Lemonnier, Sonzogno, Milan).

Italian: *Elective Course.*

Adapted for beginners. *Two hours weekly.* Dr. SHAW.

Texts:—Grandgent: *Italian Grammar* (Heath); Bowen: *Italian Reader* (Heath); Del Testa: *L'Oro e l'Orpello* (Heath); Sersao: *All' Erta, Sentinella* (Galli); Barrili: *Una Notte Bizzarra* (Jenkins); Verga: *La Storia di una Capinera* (Treves); Capuana: *Homo* (Treves); Dante: *Inferno* (Lemonnier).

Commercial Courses.

Spanish: *Conversation*. Adapted for beginners and open also to persons not connected with the University. *Twice weekly*. Mr. GOULD.

Text:—Ybarra: *Practical Method in Spanish*, Boston (Heath & Co.)

Spanish: *Commercial Course*. Adapted for beginners and open also to persons not connected with the University. *Twice weekly*. Mr. GOULD.

Text:—Garner's *Short Spanish Grammar*, New York (Amer. Book Co.)

HISTORY, POLITICS, AND ECONOMICS.

History.

Professor HERBERT B. ADAMS will conduct the following courses:

1. Historical and Political Science Association.
Alternate Friday evenings. For the staff and graduates only.
2. History of Greek and Roman Politics.
Two hours weekly, through the year. For graduates.
3. Educational History and Class Conference.
One hour weekly, through the year. For graduates.
4. Civilization and Politics in the Far East.
Two hours weekly, through the year. For undergraduates; open to graduates.
[Part of "Major History."]

Associate Professor JOHN MARTIN VINCENT.

1. Historical Research.
Two hours weekly, first half-year. For graduates.
2. History of Historical Writing.
Two hours weekly, second half-year. For graduates.
3. Historical Conference for the study of practical problems in historical research.
Two hours fortnightly, through the year. For graduates.
4. European History.
Two hours weekly, through the year. [Part of "Major History."]
5. Historical Politics.
Two hours weekly, through the year. [Part of "History-Economics."]

Dr. BERNARD C. STEINER, Associate in History:
American Political and Constitutional History.
Two hours weekly, through the year. For undergraduates; open to graduates.
[Part of "Politics Major."]

Dr. J. C. BALLAGH, Associate in History.
1. Classical and Early European History.
Four hours weekly, through the year. For undergraduates. ["History Minor."]

2. Southern History.
One hour weekly, through the year. For graduates.
3. Oral Examinations in History.
One hour weekly, through the year. For graduates.

Dr. GUY CARLETON LEE, Instructor in History:
1. English Political and Constitutional History.
Two hours weekly, through the year. For undergraduates. [Part of "Politics Major."]

2. Introduction to the Study of Law.
One hour weekly, through the year. For graduates and college seniors.
3. Historical Jurisprudence.
One hour weekly, through the year. Open to graduates and law students only.
4. Public Speaking and Class Debates.
Six hours weekly, through the year. For undergraduates.

Dr. JAMES SCHOUER, of Boston, will give a short course of lectures in the spring of 1901 on American Historical Biography.

Open to the entire University and the general public.

Politics.

Associate Professor W. W. WILLOUGHBY:

1. History of Mediaeval Political Philosophy.
Two hours weekly, first half-year. For graduates.
2. History of Modern Political Philosophy.
Two hours weekly, second half-year. For graduates.
3. Constitutional Law of the United States.
Two hours weekly, through the year. For graduates.
4. Political Conference.
Two hours fortnightly, devoted to a consideration of the problems of colonial government and administration.

Economics.

Associate Professor SIDNEY SHERWOOD:

1. Economic Seminary: Commercial Policy of the United States.
Alternate Thursday afternoons. For graduates.
2. The Law of Economic Development.
One hour weekly, through the year. For graduates.
3. Banking.
Two hours weekly, first-half year. For graduates.
4. Theory of Credit.
Two hours weekly, second half-year. For graduates.
5. Advanced Economics.
Two hours weekly, through the year. Designed for undergraduates; open to graduates. [Elective.]

Associate Professor J. H. HOLLANDER will be absent on leave during the ensuing academic year for public service as Treasurer of Porto Rico. His class work will be carried on by the following substitutes:

Mr. W. F. WILLOUGHBY, of the U. S. Department of Labor:

1. Labor Problems and Labor Legislation.
2. Social Economics.
One hour weekly, through the year. For graduates.

Dr. E. D. DURAND, of Leland Stanford, Jr. University, and of the U. S. Industrial Commission:

- American Finance.
Two hours weekly, first half-year. For graduates.
- Undergraduate Economics. (Instructor to be announced).
1. Elements of Economics. Money and Banking.
Two hours weekly, through the year. [Part of "History-Economics."]
 2. Economics Minor.

- a. Elements of Economics. Money and Banking.
- b. Industrial Growth of the United States. Commerce, home and foreign. Taxation.
Four hours weekly, through the year.

Besides furnishing a general outline of economic science of value to every citizen, this course is designed especially to aid young men in preparation for business.

Public Aid, Charity, and Correction.

Dr. J. R. BRACKETT, President of the Board of Supervisors of Charities, Baltimore, will give class instruction in the following subjects:

1. Public Aid, Charity, and Correction.
One hour weekly, first half-year. For graduates and specialists.

2. Conferences on Charitable Legislation and Custom in England and the United States.

One hour weekly, second half-year.

PHILOSOPHY.

The undergraduate courses in Philosophy provide five hours per week of work for one year, under the direction of Professor GRIFFIN. All candidates for the degree of Bachelor of Arts are required to follow them during the last year of residence.

1. Deductive and Inductive Logic.

The logical forms—terms, propositions, syllogisms—are studied as an analysis or explanation of the thinking process, and as a practical discipline in exact thought: attention is given also to the material elements in inference, as these are stated in the several inductive methods.

Creighton's *Introductory Logic* is used as a text book, with references to the works of Jevons, Mill, Bain, Keynes, and other writers.

Four hours weekly, until Christmas.

2. Psychology.

The instruction in psychology is intended to give a general view of the results of the present methods of study, the investigations in regard to the quality and intensity of sensations, the duration of psychic acts, etc.—in general, the subjects treated in Part II of Ladd's *Physiological Psychology*—being presented with sufficient detail to render them intelligible and interesting. A series of lectures and demonstrations on the anatomy and physiology of the nervous system is included in the course.

Especial emphasis is laid upon the facts of conscious experience as known through introspection, the most important end to be secured being, it is believed, such an understanding of the facts and laws of mental life as shall fit one for wise self-government and effective influence. With this view, such powers and states of mind as attention, memory, association, habit, imagination, the feelings, the will, are discussed in as concrete and practical a way as possible. A text book is used as a basis of instruction, but this is largely supplemented by informal lectures, and by references to various authorities.

Baldwin's *Elements of Psychology*, Sully's *Human Mind*, James's *Psychology*, Höffding's *Outlines of Psychology*, Dewey's *Psychology*, Hamilton's *Lectures on Metaphysics*, Porter's *Human Intellect*, Spencer's *Principles of Psychology*, Ladd's *Outlines of Physiological Psychology*, are used as books of reference. One essay on an assigned subject is required from each member of the class.

Four hours weekly, during January; five hours, from February 1 to April 1.

3. Ethics.

Ethics is treated with reference to its fundamental problems as a theoretical science, and also from a practical point of view. Its psychological basis in the various forms of feeling native to our constitution, and in the power of rational self-determination; the nature of the sense of obligation; the authority of conscience; the diversities of moral opinion; the historic theories of morals—hedonism, utilitarianism, intuitionism, and the application to ethical theory of the doctrine of evolution;—these are some of the topics discussed.

Fowler's *Principles of Morals*, Part II, is employed as a text-book, but the instruction is given, to a considerable extent, through lectures. One essay is required from each member of the class.

Five hours weekly, after April 1.

4. History of Philosophy.

Outline of Greek Philosophy.

Weekly, first half-year.

Outline of Modern Philosophy. [Optional Course.]

Weekly, second half-year.

For next year the following advanced courses in Philosophy are offered:

1. Modern Philosophy from Descartes to Kant.

Weekly, through the year. Professor GRIFFIN.

2. Modern Ethical Theories.

Fortnightly. Professor GRIFFIN.

JOHNS HOPKINS MEDICAL SCHOOL.

The session begins October 1 and extends to June 15.

The Annual Announcement of the Medical School is now ready and will be sent on application. Announcements of the courses for graduates in medicine will also be sent on application.

STAFF.

	{ F. P. MALL, M. D., Professor. R. G. HARRISON, PH. D., M. D., Asso. Professor. C. R. BARDEEN, M. D., Associate.
Anatomy	{ H. McE. KNOWER, PH. D., Instructor. M. T. SUDLER, PH. D., Instructor. J. B. MACCALLUM, M. D., Assistant. W. H. LEWIS, M. D., Assistant.
Physiology	{ W. H. HOWELL, PH. D., M. D., Professor. G. P. DREYER, PH. D., Associate Professor. P. M. DAWSON, M. D., Instructor.
Physiological Chemistry	{ J. J. ABEL, M. D., Professor. WALTER JONES, PH. D., Associate.
Pharmacology and Toxicology	{ J. J. ABEL, M. D., Professor. REID HUNT, PH. D., M. D., Assoc. Professor.
Pathology and Bacteriology	{ W. H. WELCH, M. D., LL. D., Professor. N. MACL. HARRIS, M. B., Associate. W. G. MACCALLUM, M. D., Associate. E. L. OPIE, M. D., Instructor. H. T. MARSHALL, M. D., Assistant.
Medicine	{ WILLIAM OSLER, M. D., LL. D., Professor. W. S. THAYER, M. D., Associate Professor. T. B. FUTCHER, M. B., Associate. F. R. SMITH, M. D., Instructor. H. B. JACOBS, M. D., Instructor. T. McCRAE, M. B., Instructor. L. P. HAMBURGER, M. D., Assistant. C. P. EMERSON, M. D., Instructor.
Surgery	{ W. S. HALSTED, M. D., Professor. J. M. T. FINNEY, M. D., Associate Professor. J. C. BLOODGOOD, M. D., Associate. H. W. CUSHING, M. D., Associate. H. H. YOUNG, M. D., Instructor. W. S. BAER, M. D., Assistant.
Gynecology	{ H. A. KELLY, M. D., Professor. W. W. RUSSELL, M. D., Associate Professor. T. S. CULLEN, M. B., Associate Professor. OTTO G. RAMSAY, M. D., Associate. E. HURDON, M. D., Assistant.
Obstetrics	{ J. W. WILLIAMS, M. D., Professor. G. W. DOBBIN, M. D., Associate. F. W. LYNCH, M. D., Assistant.
Psychiatry	{ H. M. HURD, M. D., LL. D., Professor. H. J. BERKLEY, M. D., Clinical Professor.
Pediatrics	{ W. D. BOOKER, M. D., Clinical Professor.
Neurology	{ H. M. THOMAS, M. D., Clinical Professor. STEWART PATON, M. D., Assistant.
Laryngology and Rhinology	{ J. N. MACKENZIE, M. D., Clinical Professor.
Ophthalmology and Otolaryngology	{ SAMUEL THEOBALD, M. D., Clinical Professor. R. L. RANDOLPH, M. D., Associate. H. O. REIK, M. D., Assistant.
Dermatology	{ J. W. LORD, M. D., Clinical Professor. T. C. GILCHRIST, M. D., Clinical Professor.
History and Literature of Medicine.	{ J. S. BILLINGS, M. D., Lecturer.

DEGREES CONFERRED JUNE 12, 1900.

The public exercises of Commencement were held in the Academy of Music at 4 p. m. Tuesday, June 12, 1900. Degrees were conferred on forty-two bachelors of arts, thirty-three doctors of philosophy, and forty-three doctors of medicine. The honors of the year and the recent appointments were announced (see p. 86). In the absence of President Gilman, Professor Gildersleeve presided and conferred the degrees. An address was made by Professor Osler.

DOCTORS OF PHILOSOPHY.

HOMER VAN VALKENBURG BLACK, of Atlanta, Ga., A. B., University of Georgia, 1896. *Subjects*: Chemistry, Geology, and Mineralogy. *Dissertation*: The Permanganates of Barium, Strontium, and Calcium. *Referees on dissertation*: Professors Remsen and Morse.

WILLIAM MARTIN BLANCHARD, of Hertford, N. C., A. B., Randolph-Macon College, 1894. *Subjects*: Chemistry, Physics, and Geology. *Dissertation*: The Chlorides of Parabromorthosulphobenzoic Acid and some of their Derivatives. *Referees on dissertation*: Professors Remsen and Morse.

HALL CANTER, of Baltimore, A. B., Randolph-Macon College, 1892. *Subjects*: Chemistry, Physiology, and Biology. *Dissertation*: Orthophenylsulphonebenzoic Acid and Related Compounds. *Referees on dissertation*: Professors Remsen and Morse.

CHARLES EDWARD CASPARI, of Baltimore, A. B., Johns Hopkins University, 1896. *Subjects*: Chemistry, Geology, and Mineralogy. *Dissertation*: I. An Investigation of the Fatty Oil contained in the Seeds of *Lindera Benzoin*. II. Lauric Acid and some of its Derivatives. *Referees on dissertation*: Professors Remsen and Morse.

HARDEE CHAMBLISS, of Selma, Ala., Virginia Military Institute, 1894. *Subjects*: Chemistry, Geology, and Physics. *Dissertation*: The Permanganates of Magnesium, Zinc, and Cadmium. *Referees on dissertation*: Professors Remsen and Morse.

WILLIAM SIDNEY DREWRY, of Fayetteville, N. C., A. B., University of Virginia, 1893. *Subjects*: History, Economics, and Politics. *Dissertation*: Slave Insurrections in Virginia (1830-1865). *Referees on dissertation*: Dr. Steiner and Dr. Ballagh.

JAMES EDWIN DUERDEN, of Kingston, Jamaica, Associate, Royal College of Science, London, 1889. *Subjects*: Zoology, Paleontology, and Physiology. *Dissertation*: West-Indian Madreporarian Polyps. *Referees on dissertation*: Professors Brooks and Andrews.

LUTHER PFAHLER EISENHART, of York, Pa., A. B., Pennsylvania College, 1896. *Subjects*: Mathematics, Physics, and Astronomy. *Dissertation*: Infinitesimal Deformation of Surfaces. *Referees on dissertation*: Professors Newcomb and Craig.

HERBERT BALDWIN FOSTER, of Baltimore, A. B., Harvard University, 1895. *Subjects*: Greek, Sanskrit, and Latin. *Dissertation*: On the Significance of the *Deus ex Machina* in the Extant Dramas of Euripides. *Referees on dissertation*: Professors Gildersleeve and Spieker.

WILLIAM LINWOOD FOUSHEE, of Roxboro, N. C., A. M., Wake Forest College, 1894. *Subjects*: Greek, Latin, and Sanskrit. *Dissertation*: The Relation of Plato to Animate Nature. *Referees on dissertation*: Professors Gildersleeve and Spieker.

WIGHTMAN WELLS GARNER, of Darlington, S. C., A. B., South Carolina College, 1896. *Subjects*: Chemistry, Geology, and Physics. *Dissertation*: Action of Aromatic Sulphonchlorides on Urea. *Referees on dissertation*: Professors Remsen and Morse.

CLYDE CHEW GLASCOCK, of Buckland, Va., University of Virginia, 1892. *Subjects*: German, French, and Latin. *Dissertation*: The Preterit Tense of the verb *haben* in Rime-position in Middle High German. *Referees on dissertation*: Professors Wood and Vos.

LAWRENCE EDMONDS GRIFFIN, of Hamline, Minn., A. B. and Ph. B., Hamline University, 1895. *Subjects*: Zoology, Physiology, and Botany. *Dissertation*: The Anatomy of *Nautilus Pompilius*. *Referees on dissertation*: Professors Brooks and Andrews.

SIVERT N. HAGEN, of Hagan, Minn., A. B., Luther College, 1896. *Subjects*: English, German, and French. *Dissertation*: The Norse Loan-Words in the York Mystery Plays. *Referees on dissertation*: Professors Bright and Browne.

JOSEPH CAWDELL HERRICK, of Virginia, A. B., University of Virginia, 1896. *Subjects*: Physiology, Chemistry, and Physics. *Dissertation*: The Influence of Variation of Temperature upon Nervous Conductivity, studied by the Galvanometric Method. *Referees on dissertation*: Professors Howell and Dreyer.

DAVID WILBUR HORN, of Carlisle, Pa., A. B., Dickinson College, 1897. *Subjects*: Chemistry, Geology, and Physics. *Dissertation*: A Study of the Action of Carbon Dioxide on the Borates of Barium, and of the Action

of Acid Borates on the Carbonate of Barium at High Temperatures. *Referees on dissertation*: Professors Remsen and Morse.

WILLIAM BASHFORD HUFF, of Boscobel, Wis., A. B., University of Wisconsin, 1889. *Subjects*: Physics, Chemistry, and Electricity. *Dissertation*: The Spectra of Mercury. *Referees on dissertation*: Professors Rowland and Ames.

JULIAN HUGUENIN, of Charleston, S. C., A. B., Charleston College, 1895. *Subjects*: English, German, and French. *Dissertation*: Secondary Stress in Anglo-Saxon,—determined by Metrical Criteria. *Referees on dissertation*: Professors Bright and Browne.

WALTER HULLIHEN, of Staunton, Va., A. B., University of Virginia, 1896. *Subjects*: Latin, Greek, and German. *Dissertation*: The Use of the Particles *Antequam* and *Priusquam*, with special reference to the Historical Development of their Subjunctive Usage. *Referees on dissertation*: Professors Smith and Spieker.

ROBERT EDMUND HUMPHREYS, of Salem, Va., A. B., Emory and Henry College, 1889. *Subjects*: Chemistry, Geology, and Mineralogy. *Dissertation*: The Action of Phenol on the Chlorides of Orthosulphobenzoic Acid. *Referees on dissertation*: Professors Remsen and Morse.

CHARLES RANALD MCINNIS, of Vankleek Hill, Ont., A. M., Queen's University (Ont.), 1896. *Subjects*: Mathematics, Physics, and Astronomy. *Dissertation*: Supersculated Sections of Surfaces. *Referees on dissertation*: Professors Newcomb and Craig.

WILLIAM STARR MYERS, of Asheville, N. C., A. B., University of North Carolina, 1897. *Subjects*: History, Economics, and Politics. *Dissertation*: The Maryland Constitution of 1864. *Referees on dissertation*: Professor Adams and Dr. Steiner.

AUSTIN McDOWELL PATTERSON, of Xenia, O., A. B., Princeton University, 1897. *Subjects*: Chemistry, Geology, and Mineralogy. *Dissertation*: The Reduction of Permanganic Acid by Hydrogen and Ethylene and a Study of some of its Salts. *Referees on dissertation*: Professors Remsen and Morse.

LOUIS MAXWELL POTTS, of Canonsburg, Pa., A. B., Washington and Jefferson College, 1896. *Subjects*: Physics, Chemistry, and Mathematics. *Dissertation*: Rowland's New Method for measuring Electric Absorption and Energy Losses due to Hysteresis and Foucault Currents, and Detection of Short Circuits in Coils. *Referees on dissertation*: Professors Rowland and Ames.

GEORGE LOVIC PIERCE RADCLIFFE, of Lloyd's, Md., A. B., Johns Hopkins University, 1897. *Subjects*: History, Politics and Economics. *Dissertation*: Governor Thomas H. Hicks, of Maryland, and the Civil War. *Referees on dissertation*: Professor Adams and Dr. Steiner.

ALBERT MOORE REESE, of Baltimore, A. B., Johns Hopkins University, 1892. *Subjects*: Zoology, Paleontology, and Botany. *Dissertation*: Structure and Development of the Thyroid Gland in *Petromyzon*. *Referees on dissertation*: Professors Brooks and Andrews.

HERBERT MEREDITH REESE, of Baltimore, A. B., Johns Hopkins University, 1897. *Subjects*: Physics, Mathematics, and Physical Chemistry. *Dissertation*: An Investigation of the Zeeman Effect with reference to Cadmium, Zinc, Magnesium, Iron, Nickel, Titanium, Carbon, Calcium, Aluminium, Silicon, and Mercury. *Referees on dissertation*: Professors Rowland and Ames.

WILLIAM ROSENAU, of Baltimore, A. B., University of Cincinnati, 1888. *Subjects*: Hebrew, Arabic, and History of Philosophy. *Dissertation*: Hebraisms in the Authorized Version of the Bible. *Referees on Dissertation*: Professors Haupt and Bright.

RICHARD BURTON ROWE, of Clarksville, N. Y., Ph. B., Union College, 1896. *Subjects*: Geology, Mineralogy, and Biology. *Dissertation*: The Paleodevonian Formations in Maryland: a Study of their Stratigraphy and Faunas. *Referees on dissertation*: Professors Clark and Reid.

JAMES EUSTACE SHAW, of Florence, Italy, A. B., Johns Hopkins University, 1896. *Subjects*: Italian, French, and History. *Dissertation*: History of the Development of the Auxiliary Uses of *Venire* and *Andare* in Italian. *Referees on dissertation*: Professor Elliott and Dr. L. E. Menger.

ERNEST ASHTON SMITH, of Meadville, Pa., A. B., Ohio Wesleyan University, 1888. *Subject*: Economics, History, and Politics. *Dissertation*: History of the Confederate Treasury. *Referees on dissertation*: Professor Sherwood and Dr. Steiner.

ELISHA CHISHOLM WALDEN, of Cincinnati, O., A. B., Ohio Wesleyan University, 1892. *Subjects*: Physiology, Pathology, and Chemistry. *Dissertation*: A Plethysmographic Study of the Conditions during Hypnotic Sleep. *Referees on dissertation*: Professors Howell and Welch.

CHARLES CLINTON WEAVER, of Greensboro, N. C., A. B., Trinity College (N. C.), 1895. *Subjects*: History, Politics, and History of Philosophy. *Dissertation*: Internal Improvements in North Carolina previous to 1860. *Referees on dissertation*: Professor Adams and Dr. Ballagh.

DOCTORS OF MEDICINE.

JOSEPH AKERMAN, of Cartersville, Ga., A. B., University of Georgia, 1894.
HERBERT WILLIAMS ALLEN, of Oakland, Cal., S. B., University of California, 1896.

NABEL FLETCHER AUSTIN, of Minneapolis, Minn., S. B., University of Minnesota, 1893.

ALMA EMERSON BEALE, of Schaghticoke, N. Y., A. B., Wellesley College, 1891.

MILTON BETTMANN, of Cincinnati, O., A. B., Harvard University, 1897.

EVELYN BRIGGS, of Sacramento, Cal., A. B., Leland Stanford Jr. University, 1896.

LAWRASON BROWN, of Casanova, Va., A. B., Johns Hopkins University, 1895.

HERMAN BRÜLLE, of Fredericksburg, Va., A. B. and S. B., Hampden-Sidney College, 1895.

CURTIS FIELD BURNAM, JR., of Frankfort, Ky., A. B., Central University, 1895.

ARTHUR SMITH CHITTENDEN, of Binghamton, N. Y., A. B., Yale University, 1896.

HENRY ASBURY CHRISTIAN, of Lynchburg, Va., A. B. and A. M., Randolph-Macon College, 1895.

WILLIAM REMSHART DANCY, of Savannah, Ga., S. B., University of Georgia, 1896.

AUGUSTUS HARTJE EGGERS, of Allegheny, Pa., Ph. D., Yale University, 1896.

HENRY COURTNEY EVANS, of Youngstown, O., A. B., Adelbert College, 1896.

ROSE FAIRBANK, of Hatfield, Mass., A. B., Smith College, 1895.

CLARENCE B. FARRAR, of Cattaraugus, N. Y., A. B., Harvard University, 1896.

ARTHUR LAWRENCE FISHER, of San Francisco, Cal., S. B., University of California, 1896.

WILLIAM ALEXANDER FISHER, JR., of Baltimore, A. B., Princeton University, 1896.

HOWARD FLETCHER, of Warrenton, Va., A. B., Randolph-Macon College, 1895.

JOSEPH MARSHALL FLINT, of Chicago, Ill., S. B., University of Chicago, 1895.

WILLIAM PATRICK HEALY, of Bridgeport, Conn., Ph. B., Yale University, 1896.

WILLIAM FAITHFUL HENDRICKSON, of Baltimore, A. B., Johns Hopkins University, 1896.

ALBION WALTER HEWLETT, of San Francisco, Cal., S. B., University of California, 1895.

WILLIAM CRISSEY KELLOGG, of New Canaan, Conn., A. B., Yale University, 1896.

PRESTON KYES, of North Jay, Me., A. B., Bowdoin College, 1896.

LEONA LEBUS, of Los Angeles, Cal., S. B., Wellesley College, 1896.

WARREN HARMON LEWIS, of Oak Park, Ill., S. B., University of Michigan, 1894.

HARRY WILSON LITTLE, of Evansville, Ind., S. B., Wabash College, 1896.

ELLEN LOUISE LOWELL, of Calais, Me., A. B., Leland Stanford Jr. University, 1896.

JOHN BRUCE MACCALLUM, of Dunnville, Ont., A. B., University of Toronto, 1896.

MARY WILBUR MARVELL, of Fall River, Mass., S. B., Wellesley College, 1894.

CLARA R. MELTZER, of New York City, A. B., Barnard College, Columbia University, 1896.

CLELIA DUEL MOSHER, of Palo Alto, Cal., A. B., Leland Stanford Jr. University, 1893.

HANNAH GLIDDEN MYRICK, of Dorchester, Mass., A. B., Smith College, 1896.

EDWARD SPILLER OLIVER, of Baltimore, A. B., Johns Hopkins University, 1895.

RICHARD FOSTER RAND, of Meriden, Conn., Ph. B., Yale University, 1895.

DOROTHY M. REED, of Leyden, N. Y., B. L., Smith College, 1895.

GLANVILLE YEISLEY RUSK, of Baltimore, A. B., Johns Hopkins University, 1896.

FLORENCE RENA SABIN, of Denver, Colo., S. B., Smith College, 1893.

WILLIAM FRANCIS MATTINGLY SOWERS, of Washington, D. C., A. B., Princeton University, 1896.

ELLEN APPLETON STONE, of Providence, R. I., A. B., Radcliffe College, Harvard University, 1895.

MORTIMER WARREN, of Cumberland Mills, Me., A. B., Bowdoin College, 1896.

PAUL GERHARDT WOOLLEY, of Chicago, Ill., S. B., University of Chicago, 1896.

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BACHELORS OF ARTS.

ROGER BROOKE TANEY ANDERSON, of Baltimore.

HOWARD BAETJER, of Baltimore.

CHRISTIAN JOHN BEEUWKES, of Baltimore.

BYRON NOBLE BOUCHELLE, of Chesapeake City, Md.

AUSTIN ADAMS BREED, of Cincinnati, Ohio.

CHARLES EDWARD BROOKS, of Baltimore.

EDWARD SKIPWITH BRUCE, of Baltimore.

JAMES LUTHER ALBERT BURRELL, of Baltimore.

CHRISTOPHER THOMPSON CLARK, of Washington, D. C.

MCQUILKIN DEGRANGE, of Frederick, Md.

JOHN HOWARD EAGER, JR., of Baltimore.

JOHN EDWARD EWELL, of Baltimore.

FREDERICK BONNER FLINN, of Worcester, Mass.

FREDERICK FOSTER, of Baltimore.

OTTO CHARLES GLASER, of Baltimore.

JOSEPH DAVID GREENE, of Lake Benton, Minn.

JOHN WHEELER GRIFFIN, of Baltimore.

STUART HEYMAN, of Baltimore.

HARRY DICKINSON HILL, of Baltimore.

JOHN PHILIP HILL, of Baltimore.

EDWARD PECHIN HYDE, of Baltimore.

ROBERT CLARK KERR, of Baltimore.

DONALD MACY LIDDELL, of Denver, Colo.

NORVIN RUDOLF LINDHEIM, of Greensboro, N. C.

LEONARD LEOPOLD MACKALL, of Baltimore.

T. HARTLEY MARSHALL, of Maryland.

REGINALD LEY MCALL, of Red Hill, England.

JARED SPARKS MOORE, of Baltimore.

TOBIAS NOËL DELOUGHMOE PURCELL, of Sykesville, Md.

ROBERT BRUCE ROULSTON, of Baltimore.

FRANK PEYTON ROUS, of Baltimore.

JAMES EDWARD ROUTH, JR., of Petersburg, Va.

ALEXANDER VAN RENSSELAER SCHERMERHORN, of Baltimore.

WILSON LEVERING SMITH, of Baltimore.

MILTENBERGER NEALE SMULL, of Baltimore.

JAMES CARLYLE STEPHENS, of Norfolk, Va.

GEORGE LANE TANEYHILL, JR., of Baltimore.

BAYARD TURNBULL, of Baltimore.

MILLER WINGERT, of Hagerstown, Md.

NATHAN WINSLOW, of Baltimore.

ARTHUR WRIGHT, of Baltimore County, Md.

PHILIP HANSON HISS, JR., of New York—(Class of 1891).

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APPOINTMENTS, PROMOTIONS, AND HONORS ANNOUNCED

JUNE 12, 1900.

The following appointments and promotions have recently been made by the Trustees:—

In the Philosophical Faculty:

FRANK MORLEY, M. A., D. Sc., recently Professor in Haverford College, to be Professor of Mathematics.

HARRY C. JONES, Ph. D., now Associate, to be Associate Professor of Physical Chemistry.

JOHN B. WHITEHEAD, A. B., now Instructor, to be Associate in Applied Electricity.

HARRY L. WILSON, Ph. D., now Instructor, to be Associate in Latin.

HENRY S. WEST, Ph. D., now Assistant, to be Instructor in English.

J. EUSTACE SHAW, Ph. D., now Fellow, to be Instructor in Italian.

EDWARD D. DURAND, Ph. D., to be Lecturer in American Finance.

WILLIAM F. WILLOUGHBY, A. B., to be Lecturer in Social Economics.

In the Medical Faculty:

THOMAS S. CULLEN, M. B., now Associate, to be Associate Professor of Gynecology.

GEORGE P. DREYER, Ph. D., now Associate, to be Associate Professor of Physiology.

REID HUNT, M. D., Ph. D., now Associate, to be Associate Professor of Pharmacology.

WILLIAM W. RUSSELL, M. D., now Associate, to be Associate Professor of Gynecology.

NORMAN MACL. HARRIS, M. B., now Assistant, to be Associate in Bacteriology.

WILLIAM G. MACCALLUM, M. D., now Assistant, to be Associate in Pathology.

OTTO G. RAMSAY, M. D., now Instructor, to be Associate in Gynecology.

PERCY M. DAWSON, M. D., now Assistant, to be Instructor in Physiology.

CHARLES P. EMERSON, M. D., to be Instructor in Medicine.

EUGENE L. OPIE, M. D., now Assistant, to be Instructor in Pathology.

MERVIN T. SUDLER, Ph. D., now Assistant, to be Instructor in Anatomy.

WILLIAM S. BAER, M. D., to be Assistant in Orthopaedic Surgery.

WARREN H. LEWIS, M. D., to be Assistant in Anatomy.

FRANK W. LYNCH, M. D., to be Assistant in Obstetrics.

JOHN B. MACCALLUM, M. D., to be Assistant in Anatomy.

HARRY T. MARSHALL, M. D., now Fellow, to be Assistant in Pathology.

ADAM T. BRUCE FELLOWS IN BIOLOGY.

CASWELL GRAVE, of Monrovia, Ind., S. B., Earlham College, 1895, Fellow, Johns Hopkins University, 1898-99, and Ph. D., 1899.

LAWRENCE EDMONDS GRIFFIN, of Hamline, Minn., A. B. and Ph. B., Hamline University, 1895, Fellow, Johns Hopkins University, 1899-1900, and Ph. D., 1900.

WILLIAM S. RAYNER FELLOW IN SEMITIC LANGUAGES.

KARL JOSEF GRIMM, of Baltimore, Fellow, Johns Hopkins University, 1897-99, and Ph. D., 1899.

FELLOWS, 1900-1901.

HERBERT THOMPSON ARCHIBALD, of Halifax, N. S., A. B., Dalhousie University, 1897. *Greek*.

GEORGE ERNEST BARNETT, of Mocksville, N. C., A. B., Randolph Macon College, 1891. *Economics*.

FRANK RINGGOLD BLAKE, of Baltimore, A. B., Johns Hopkins University, 1897. *Semitic Languages*.

GEORGE DOBBIN BROWN, of Howard Co., Md., A. B., Johns Hopkins University, 1895. *English*.

BENJAMIN PALMER CALDWELL, of New Orleans, La., A. B., Tulane University, 1893. *Chemistry*.

HOWARD VERNON CANTER, of Cantersburg, Va., A. B., Washington and Lee University, 1896. *Latin*.

WINTERTON CONWAY CURTIS, of The Dalles, Ore., A. B., Williams College, 1897. *Zoology*.

JOSEPH ERLANGER, of San Francisco, Cal., S. B., University of California, 1895; M. D., Johns Hopkins University, 1899. *Pathology*.

ARTHUR HENRY EWING, of Ludhiana, India, A. B., Washington and Jefferson College, 1887. *Sanskrit*.

JOSEPH CHRISTIE WHITNEY FRAZER, of Lexington, Ky., S. B., Kentucky State College, 1897. *Chemistry*.

NORMAN EVERETT GILBERT, of Middletown, Conn., A. B., Wesleyan University, 1895. *Physics*.

ROSCOE GUERNSEY, of East Cobleskill, N. Y., A. B., Union College, 1896. *Greek*.

FRED COLE HICKS, of Tipton, Iowa, Ph. B., Cornell College, 1896. *German*.

GEORGE CURTIS MARTIN, of Adams, Mass., S. B., Cornell University, 1898. *Geology*.

WILLIAM ELEJIUS MARTIN, of Havana, Ala., A. M., Southern University (Ala.), 1898. *History*.

CHARLES ALFRED MOSEMILLER, of New Albany, Ind., A. B., Indiana University, 1890. *Romance Languages*.

LOUIS ALEXANDER PARSONS, of Burlington, Iowa, A. B., Iowa State University, 1895. *Physics*.

ISRAEL EUCLID RABINOVITCH, of Baltimore. *Mathematics*.

CHARLES SIDNEY SMITH, of Princeton, N. J., A. B., Princeton University, 1888. *Latin*.

PERCY GOLDTHWAITE STILES, of Newtonville, Mass., S. B., Mass. Institute of Technology, 1897. *Physiology*.

HOPKINS SCHOLARSHIPS

OFFERED TO VIRGINIA AND NORTH CAROLINA GRADUATES.

These scholarships, in accordance with the wishes of the founder, are awarded to candidates from Virginia and North Carolina who are considered by the Academic Council to be the "most deserving of choice because of their character and intellectual promise." The Maryland Scholarships are awarded to undergraduates.

R. M. BIRD (A. B., Hampden-Sidney College, 1897), of Petersburg, Va.

I. H. BLACKWELL (A. B., Randolph-Macon College, 1895), of Broadrun, Va.

W. K. BOYD (A. B., Trinity College, N. C., 1897), of Durham, N. C.

J. R. C. BROWN (A. B., Hampden-Sidney College, 1895), of Penn Laird, Va.

H. A. CONVERSE (A. B., Hampden-Sidney College, 1893), of Harrisonburg, Va.

C. D. COWLES, JR. (Guilford College, 1900), of Guilford College, N. C.

W. B. DANIEL (A. M., Wake Forest College, 1892), of Wake Forest, N. C.

J. L. DAVIS (S. B., South Carolina College, 1897), of Asheville, N. C.

D. B. EASTER (A. M., Randolph-Macon College, 1891), of Ashland, Va.

H. J. ECKENRODE (A. B., Fredericksburg College, 1898), of Fredericksburg, Va.

A. W. FREEMAN (S. B., Richmond College, 1899), of Richmond, Va.

C. D. HARRIS (S. B., North Carolina Agricultural College, 1897), of Raleigh, N. C.

C. H. S. HUMPHREYS (A. B., Emory and Henry College, 1895), of Saltville, Va.

E. H. HUMPHREYS (Davidson College, 1900), of Davidson, N. C.
 A. A. KERN (A. B., Randolph-Macon College, 1898), of Ashland, Va.
 B. KILBY (A. M., Randolph-Macon College, 1897), of Suffolk, Va.
 F. C. LAMB (S. B., North Carolina Agricultural College, 1898), of Raleigh, N. C.
 R. E. LOVING (A. B., Richmond College, 1896), of Wilmington, Va.
 A. W. McWHORTER (A. B., Roanoke College, 1895), of Salem, Va.
 A. J. MORRISON (A. B., Hampden-Sidney College, 1895), of Farmville, Va.
 M. L. NININGER (A. B., University of Virginia, 1898), of Roanoke City, Va.
 D. P. PARHAM (A. M., Randolph-Macon College, 1891), of Richmond, Va.
 G. RAGLAND (A. B., Richmond College, 1896), of Richmond, Va.
 R. L. RAMSAY (A. B., Fredericksburg College, 1899), of Fredericksburg, Va.
 J. E. ROUTH, JR. (A. B., Johns Hopkins University, 1900), of Petersburg, Va.
 G. B. SANDERLIN (A. B., Wake Forest College, 1899), of Belcross, N. C.
 G. L. STEVENS (William and Mary College, 1900), of Williamsburg, Va.
 T. J. STUBBS, JR. (A. B., William and Mary College, 1899), of Williamsburg, Va.
 R. H. WATKINS (A. B., Hampden-Sidney College, 1895), of Warrenton, N. C.
 W. C. WICKER (A. B., University of North Carolina, 1895), of Elon College, N. C.

HONORS OF THE UNDERGRADUATES.

The standing of students in the graduating class, who are entitled to honorable mention, is as follows:

EDWARD PECHIN HYDE.
 ROBERT BRUCE ROULSTON.
 DONALD MACY LIDDELL.
 HOWARD BAETJER.
 JOHN HOWARD EAGER, JR.
 FRANK PEYTON ROUS.
 JOSEPH DAVID GREENE.
 CHARLES EDWARD BROOKS.
 JOHN WHEELER GRIFFIN.
 LEONARD LEOPOLD MACKALL.
 OTTO CHARLES GLASER.
 JARED SPARKS MOORE.
 BYRON NOBLE BOUCHELLE.
 JASPER LUTHER ALBERT BURRELL.

The standing of students of the second year, who are entitled to honorable mention, is as follows:

AARON EMBER.
 JOHN GRESHAM MACHEN.
 ROBERT BROOKS MORSE.
 NORMAN BOYER.
 OTTO ALBERT STRUTH.
 LEE MILTON HOLLANDER.
 JOHN ADELBERT RIGGINS.
 GEORGE EDWARD REHBERGER.
 LEYBURN GREAR FISHACH.
 EUGENE JOSEPH LEOPOLD.
 WALTER B. SWINDELL, JR.

The standing of students of the first year, who are entitled to honorable mention, is as follows:

{ CHARLES MARKELL, JR.
 { CHARLES AUGUSTUS MYERS.
 SAMUEL WOLMAN.
 HARVEY BRINTON STONE.
 ALBERT GOUCHER DEW.
 DAVID ISRAEL MACHT.
 SOLOMON STROUSE.
 BARTGIS MCGLOONE.
 WILLIAM KIRK.
 WALTER FORD REYNOLDS.
 MARBURY BLADEN OGLE.

The Hopkins Scholarships, which are awarded to residents of Maryland only, are bestowed as follows:

SECOND YEAR.

AARON EMBER.
 JOHN GRESHAM MACHEN.
 ROBERT BROOKS MORSE.
 NORMAN BOYER.
 OTTO ALBERT STRUTH.

FIRST YEAR.

CHARLES MARKELL, JR.
 CHARLES AUGUSTUS MYERS.
 SAMUEL WOLMAN.
 HARVEY BRINTON STONE.
 ALBERT GOUCHER DEW.

HONORS OF THE MEDICAL STUDENTS.

Resident House Officers in the Johns Hopkins Hospital.

HERBERT WILLIAMS ALLEN, M. D. RICHARD FOSTER RAND, M. D.
 MILTON BETTMANN, M. D. DOROTHY M. REED, M. D.
 CURTIS FIELD BURNAM, JR., M. D. GLANVILLE YEISLEY RUSK, M. D.
 HENRY ASBURY CHRISTIAN, M. D. FLORENCE RENA SABIN, M. D.
 ARTHUR LAWRENCE FISHER, M. D. WILLIAM F. M. SOWERS, M. D.
 WILLIAM ALEX. FISHER, JR., M. D. PAUL GERHARDT WOOLLEY, M. D.

The following are entitled by their records to appointments as Resident House Officers, but have accepted positions elsewhere:

LAWRASON BROWN, M. D. ALBION WALTER HEWLETT, M. D.
 ARTHUR SMITH CHITTENDEN, M. D. PRESTON KYES, M. D.
 JOSEPH MARSHALL FLINT, M. D. WARREN HARMON LEWIS, M. D.
 WILLIAM PATRICK HEALY, M. D. JOHN BRUCE MACCALLUM, M. D.

Mr. H. F. PERKINS, A. B., has been designated to occupy the table allotted to this University in the laboratory of the U. S. Fish Commission at Wood's Hall.

RECENT GIFTS TO THE UNIVERSITY AND AWARD OF PRIZES.

THE JOHN MARSHALL PRIZE.

The John Marshall Prize for 1900 has been awarded to JAMES MORTON CALLAHAN, Ph. D., for his work entitled "Cuba and International Relations," recently published. This prize, consisting of a bronze likeness of Chief Justice Marshall, is awarded annually for the best essay written by a graduate of the University upon some subject in historical or political science.

THE TOCQUEVILLE MEDAL.

The Tocqueville gold medal is annually offered by the "Union Française des Universités d'Amérique," in honor of the illustrious Frenchman, Alexis de Tocqueville (1805-1859), to that member of the Johns Hopkins University, who shall have written the best essay on some subject illustrating any phase of French history, political or social, from 1815 to 1890, or a review of some important historical work published in France since 1890.

For 1900 the medal is awarded to JAMES EDWARD ROUTH, JR., A. B., Johns Hopkins University, 1900, for his essay on the "French Colonial System."

A portrait of Professor HERBERT B. ADAMS, painted by Mr. Thomas C. Corner, of Baltimore, has been presented to the University by Mr. Theodore Marburg.

The Maryland Society of the Colonial Dames of America has offered to the University a sum of money to provide for an annual course of lectures on American Colonial History. This gift has been accepted by the Trustees, and the first course will be given in the next academic year, on Maryland Colonial History.

The Johns Hopkins Press of Baltimore.

LIST OF SERIALS ISSUED.

AMERICAN JOURNAL OF MATHEMATICS.

This journal was commenced in 1878, under the editorial direction of Professor Sylvester. Professor Simon Newcomb is now the Editor. Twenty-one volumes of about 400 pages each have been issued, and the twenty-second is in progress. It appears quarterly. Subscription \$5 per year. Single numbers \$1.50. A very few complete sets remain. These will be sold for \$100 per set.

AMERICAN CHEMICAL JOURNAL.

This journal was commenced in 1879, with Professor Ira Remsen as Editor. Twenty-three volumes have been issued, and the twenty-fourth is in progress. This journal appears monthly. Two volumes of six numbers and of about 500 pages each are issued yearly. Subscription \$5 per year. Single numbers 50 cents.

AMERICAN JOURNAL OF PHILOLOGY.

The publication of this journal commenced in 1879, under the editorial direction of Professor Basil L. Gildersleeve. Twenty volumes of about 570 pages each have been issued, and the twenty-first is in progress. It appears four times yearly. Subscription \$3 per volume. Single numbers \$1. Sets are sold at \$60 each.

STUDIES FROM THE BIOLOGICAL LABORATORY.

The publication of these papers commenced in 1879, under the direction of Professor H. Newell Martin, with the assistance of Professor W. K. Brooks. Five volumes of about 500 pages, octavo, and 40 plates each, have been issued.

STUDIES IN HISTORICAL AND POLITICAL SCIENCE.

The publication of these papers was begun in 1882, under the editorial direction of Professor Herbert B. Adams. Seventeen series are now completed and the eighteenth series is in progress. It appears monthly. Subscription \$3 per volume. The set of seventeen series, in cloth, will be sold for \$51. Twenty-one extra volumes have also been issued.

MEMOIRS FROM THE BIOLOGICAL LABORATORY.

These monographs are issued under the editorial direction of Professor William K. Brooks. Volume IV is complete. Price of the four volumes \$30.

THE JOHNS HOPKINS UNIVERSITY CIRCULARS.

The publication of these circulars began in December, 1879, and 146 numbers have since been issued. Subscription \$1 per year.

CONTRIBUTIONS TO ASSYRIOLOGY AND COMPARATIVE SEMITIC PHILOLOGY.

The publication of this journal was begun in 1889. Professor Paul Haupt, of the Johns Hopkins University, and Professor Friedrich Delitzsch, of the University of Breslau, are the Editors. Volume IV is in progress.

THE JOHNS HOPKINS HOSPITAL REPORTS.

These Reports are edited by the Faculty of the Johns Hopkins Medical School and published for the Johns Hopkins Hospital. Their publication was begun in 1890. Volume VIII is in progress. Price \$5 per volume. The set of eight volumes will be sold for \$40.

THE JOHNS HOPKINS HOSPITAL BULLETIN.

The publication of these Bulletins began in 1889. Volume XI is in progress. They are published monthly. Subscription \$1.00 per year. The set of ten volumes will be sold for \$20.

MODERN LANGUAGE NOTES.

This journal is edited by Professor A. Marshall Elliott and his associates in the Modern Language Department. It appears monthly. The fifteenth volume is in progress. Price \$1.50 per year.

JOURNAL OF EXPERIMENTAL MEDICINE.

This journal is edited by Professor William H. Welch with the coöperation of a number of associates. It appears six times a year. Volume V is in progress. Price \$5 per year. The set of four volumes will be sold for \$25.

AMERICAN JOURNAL OF INSANITY.

Professor Henry M. Hurd is the managing editor of this journal. It appears quarterly. Vol. LVII is in progress. Subscription \$5 per year.

TERRESTRIAL MAGNETISM AND ATMOSPHERIC ELECTRICITY.

This journal is edited by Dr. L. A. Bauer. Volume V is in progress. It appears quarterly. Subscription \$2.50 per year.

REPORTS OF THE MARYLAND GEOLOGICAL SURVEY.

These reports are under the editorial direction of Professor William B. Clark, Director of the Survey. Three volumes have been issued.

REPORTS OF THE MARYLAND WEATHER SERVICE.

The reports are edited by Professor William B. Clark, Director of the Service. The first volume is now ready.

THE JOHNS HOPKINS PRESS ALSO PUBLISHES THE FOLLOWING NAMED SEPARATE WORKS:

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Exhibiting the composite structure of the books with Critical Notes in English, under the title:

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PHOTOGRAPHS OF THE NORMAL SOLAR SPECTRUM.

A series of twenty plates made under the direction of Professor Rowland. The series is sold for \$20.

DESCRIPTION OF THE JOHNS HOPKINS HOSPITAL.

Edited by Dr. John S. Billings, containing 56 large quarto plates with views, plans, etc., and 116 pages of letter-press. Price \$7.50.

REPRODUCTION OF A SYRIAC MANUSCRIPT OF THE ANTILEGOMENA EPISTLES.

Reproduction in phototype of seventeen pages of a Syriac Manuscript, containing the Epistles known as "Antilegomena," edited by Professor Isaac H. Hall. Price \$3.00.

Lists of publications will be sent on application to The Johns Hopkins Press.

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